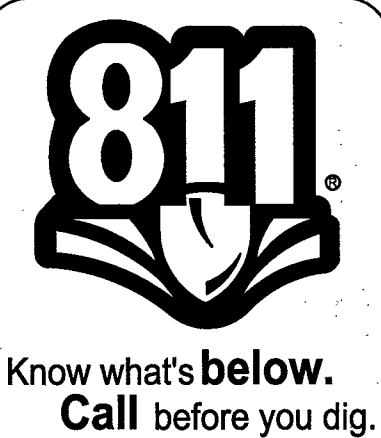
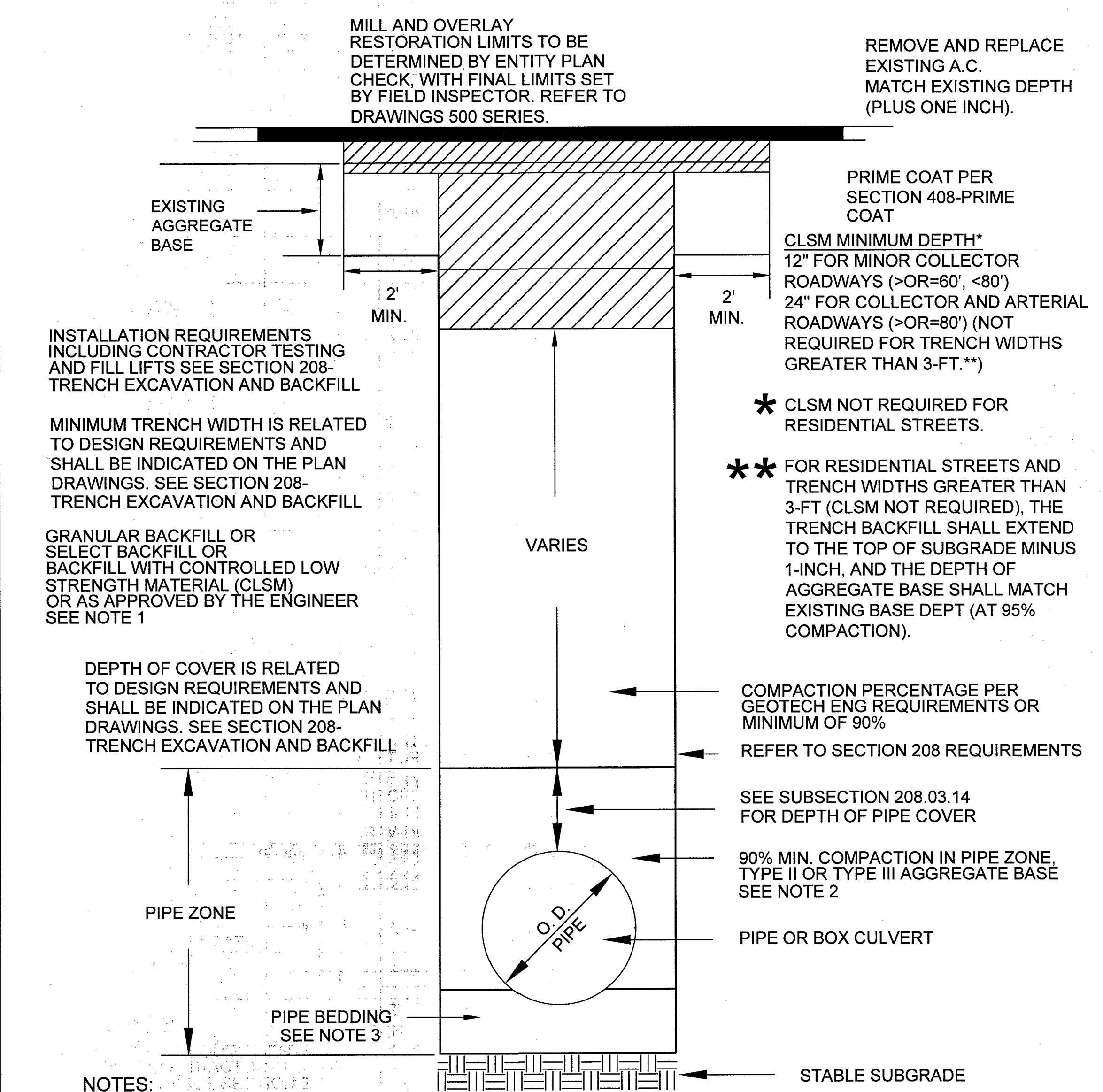




1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.		2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.		3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.		4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.	
RTC STD DWG 503							
811 Know what's below. Call before you dig.							
NO.		DESCRIPTION		BY		DATE	
REVISIONS							
TAX CODES		UNIT NO.		UNIT TYPE		PROPERTY UNITS	
INSTL.		RETIRED		INSTL.		RETIRED	
PROPOSED		COMPLETED					
AS-BUILT DRAWING-PRESSURE TEST DATA							
TEST MEDIUM TEST METHOD							
PIPE DIA. ☐ AIR ☐ GAUGE							
PIPE LENGTH ☐ NITROGEN ☐ CHART							
PIPE TYPE ☐ WATER ☐ GAUGE/ PRESS REC SN#							
MIN. DURATION							
TEST PRES. (PSIG): (MAX) (MIN)							
TIME (HOURS) (STOP)							
DATE (START) (STOP)							
PERFORMED BY:							
DATE VERIFIED BY:							
INDIVIDUAL PERFORMING VISUAL INSPECTION							
VISUAL INSPECTION CERTIFICATION							
I HAVE VISUALLY INSPECTED ALL HEATED FLUIDS, SOLVENT CEMENT, MECHANICAL JOINTS, AND WELLS THAT I HAVE							
NAME							
PERFORMED DATE							
SEE SHEET 3							
CONSTRUCTION							
INSPECTOR							
FOREMAN							
REVIEWED BY							
SEE SHEET 3							
PERMIT INFORMATION							
CITY OF LAS VEGAS							
TAX CODE 02-0200							
ISOLATION AREA		W.R. NO.		ENGINEER/TECH: RAMILO MENDOZA		PHONE: 702-365-2189	
ISO_21_DIST_093		3468309		ACCOUNT REP:		PHONE:	
		AC-3694967		PROJECT CONTACT:		PHONE:	
LOCATION		ATLAS #/TITLE #		SHEET NO: 2 OF 5		SCALE: NTS	
SEC 26		x633y520		DATE: 08/14/2018		DWN. BY: SEI	
T20S R61E				CHKD. BY:		APPVD. BY:	
M.D.M.							
GIR 2019-CLV-WASHINGTON AND BRUCE ABBREVIATION & NOTES							



- NOTES:
1. NO STONES OR LUMPS GREATER THAN 3" PERMITTED IN TRENCH 2' OR LESS IN WIDTH.
 2. TRENCH WIDTH, BEDDING, SUBGRADE AND PIPE ZONE REQUIREMENTS FOR UTILITY INSTALLATIONS SHALL CONFORM TO THE RESPECTIVE ENTITY REQUIREMENTS.
 3. CRUSHED ROCK MAY BE USED FOR PIPE BEDDING ONLY IF MATERIAL USE HAS BEEN SPECIFICALLY APPROVED BY THE GOVERNING AGENCY. SEE STANDARD DRAWING NO. 505 FOR PIPE BEDDING METHODS.
 4. LAS VEGAS VALLEY WATER DISTRICT REQUIRES PIPE BEDDING AND BACKFILL WITHIN THE PIPE ZONE TO BE OF THE SAME MATERIAL.

ABBREVIATIONS

AB	ABANDONED	OC	ON CENTER
AC	ASPHALTIC CONCRETE	OD	OUTSIDE DIAMETER
ACP	ASBESTOS CEMENT PIPE	OH	OVERHEAD
AIM	AREA ISOLATION MODULE	OHP	OVERHEAD POWER
BLVD	BOULEVARD	P	POWER
BM	BENCHMARK	PAOP	POTENTIAL ALLOWABLE OPERATING PRESSURE
BMI	BLACK MOUNTAIN INDUSTRIAL	PCC	PORTLAND CEMENT CONCRETE
BO	BLOW OFF	PE	POLYETHYLENE PIPE
BTU	BRITISH THERMAL UNIT	PH	POT HOLE
BWC	BASIC WATER COMPANY	PHMSA	PIPELINE & HAZARDOUS MATERIALS SAFETY ADMINISTRATION
COBC	CITY OF BOULDER CITY	PL	PROPERTY LINE
CC	CLARK COUNTY	PIC	POTENTIAL IMPACT CIRCLE
CCAUSD	CLARK COUNTY AREA UNIFORM STANDARD DRAWING	PLS	PRESSURE LIMITING STATION
CCRCD	CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT	PP	POWER POLE
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	PQF	PREQUALIFIED FITTING
CIP	CAST IRON PIPE	PVC	POLYVINYL CHLORIDE
CL	CENTERLINE	RAM	RISK ASSESSMENT MODEL
CLV	CITY OF LAS VEGAS	RC	REINFORCED CONCRETE
CNLV	CITY OF NORTH LAS VEGAS	RCP	REINFORCED CONCRETE PIPE
COH	CITY OF HENDERSON	SD	STORM DRAIN
DET	DETAIL	SDMH	STORM DRAIN MANHOLE
DI	DUCTILE IRON	SDR	STANDARD DIMENSION RATIO
DIA	DIAMETER	SF	SQUARE FOOT
DIMP	DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM	SHT	SHEET
DNR	DOES NOT REGISTER	SHP	STEEL HIGH PRESSURE PIPE
DWG	DRAWING	SMYS	SPECIFIED MAXIMUM YIELD STRENGTH
EFV	EXCESS FLOW VALVE	SNWA	SOUTHERN NEVADA WATER AUTHORITY
EG	EXISTING GROUND	SS	SANITARY SEWER
EHDD	EFFECTIVE HEATING DEGREE DAY	SST	STAINLESS STEEL
ELEC	ELECTRICAL	ST	STREET
ELEV	ELEVATION	STA	STATION
EMRS	ELECTRONIC MAPPING RECORDS SYSTEM	STD	STRENGTH TEST DRAWING
EPR	ELECTRONIC PRESSURE RECORDERS	STL	STEEL
ESMT	EASEMENT	SWG	SOUTHWEST GAS
EX	EXISTING	TEL	TELEPHONE
FERC	FEDERAL ENERGY REGULATORY COMMISSION	TB	THRUST BLOCK
FOS	FACILITY OUT OF SERVICE	TOP	TOP OF PIPE
FH	FIRE HYDRANT	TP	TEST POINT
GIR	GAS INFRASTRUCTURE REPLACEMENT	TRIMP	TRANSMISSION INTEGRITY MANAGEMENT PROGRAM
GPR	GAS PRESSURE REGULATOR	UDACS	UNIFORM DESIGN AND CONSTRUCTION STANDARDS
HCA	HIGH CONSEQUENCE AREA	UOC	UNUSUAL OPERATING CONDITIONS
HDD	HEATING DEGREE DAY	UOP	UNIT OF PROPERTY
HDPE	HIGH DENSITY POLYETHYLENE PIPE	UPRR	UNION PACIFIC RAILROAD
HP	HIGH PRESSURE	USD	UNIFORM STANDARD DRAWING
HERS	HOME ENERGY RATING SYSTEM	VCP	VITRIFIED CLAY PIPE
HOP	HISTORIC OPERATING PROCEDURE	VERT	VERTICAL
HVTT	HIGH VOLUME TAPPING TEE	VG	VALLEY GUTTER
ID	INSIDE DIAMETER	VSP	VINTAGE STEEL PIPE
IN	INCH(ES)	W	WATER
IPS	IRON PIPE SIZE	WMS	WORK MANAGEMENT SYSTEM
IS	IDENTIFIED SITE	WR	WORK REQUEST
JT	JOINT TRENCH	WT	WALL THICKNESS
KRG	KERN RIVER GAS COMPANY	WV	WATER VALVE
LDCPE	LARGE DIAMETER COILED POLYETHYLENE PIPE	YD	YARD(S)
LVVWD	LAS VEGAS VALLEY WATER DISTRICT		
MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE		
MCFH	THOUSAND CUBIC FEET PER HOUR		
MH	MANHOLE		
MOP	MAXIMUM OPERATING PRESSURE		
MSA	METER SET ASSEMBLY		
MVP	MAPPING VERIFICATION PROCEDURE		
NAP	NOT A PART		
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION		
NTSB	NATIONAL TRANSPORTATION SAFETY BOARD		
NTS	NOT TO SCALE		

CONSTRUCTION NOTES

1. SUGGESTED GAS LOCATIONS ARE TO CLEAR SUBSTRUCTURES LOCATE IN FIELD.
2. ALL PIPELINE CONSTRUCTION SHALL CONFORM TO APPLICABLE JURISDICTION SPECIFICATIONS.
3. DO NOT SCALE THIS DRAWING.
4. SEE AC'S FOR SERVICE REPLACEMENT AND EFV SIZING.
5. CHANGE IN PROPOSED MAIN LOCATION MUST BE AUTHORIZED BY SWG ENGINEER PRIOR TO INSTALLATION.
6. GAS MAINS SHALL BE PURGED PER OPERATIONS MANUAL.
7. REPLACE ALL ACTIVE SERVICES INCLUDING AA, PVC, M7000 PE, M8000 PE, EXCEPT WHERE EXISTING PE8100 SERVICES ARE VERIFIED, INSPECTED, AND APPROVED FOR TIE-OVER BY SWG INSPECTOR.
8. EXISTING SERVICES, VERIFICATION, AND INSPECTION REQUIRED FROM MAIN TO RISER. TIE INTO NEW MAIN IF APPROVED BY SWG INSPECTOR. REPLACE ALL AA, PVC, M7000 PE, AND M8000 PE SERVICES. PE8100 SERVICES TO BE VERIFIED, INSPECTED AND APPROVED BY SWG INSPECTOR.
9. EXISTING SERVICE, UNKNOWN TYPE, SIZE, AND LOCATION TO BE VERIFIED.
10. REPLACEMENT SERVICES TO BE SINGLE OR BRANCHED. NO CROSS-LOT REPLACEMENT SERVICES PERMITTED.
11. REPLACE ALL ANODE RISERS WITH ANODELESS RISERS.
12. ALL EXISTING UTILITY LOCATION TO BE VERIFIED PRIOR TO START OF CONSTRUCTION.
13. CONTACT ENGINEERING FOR BYPASS INFORMATION.
14. ALL MAIN TIE-INS REQUIRING TEES ARE TO BE FULL-FLOW TEES UNLESS OTHERWISE STATED.
15. ALL SHORING REQUIREMENTS SHALL CONFORM TO APPLICABLE PORTIONS OF THE OPERATIONS MANUAL. REQUEST FOR SURVEYING AND/OR STAKING WILL BE SUBMITTED TO ENGINEERING 72 HOURS IN ADVANCE, MINIMUM.
16. TRENCHING AND PAVEMENT REPLACEMENT SHALL CONFORM WITH RTC STANDARD 503, 500.3 AND UNIFORM STANDARD SPEC SECTION 208.
17. PROTECT VALLEY GUTTERS IN PLACE. BORE DO NOT CUT

RTC NOTES:

PAVEMENT REPAIR SHALL CONFORM TO RTC:

A1 503

A2 500.3

ENGINEER/TECH: RAMILO MENDOZA

ACCOUNT REP:

PROJECT CONTACT:

SHEET NO: 2 OF 5

DWN. BY: SEI

SCALE: NTS

CHKD. BY:

DATE: 08/14/2018

APPVD. BY:

TITLE

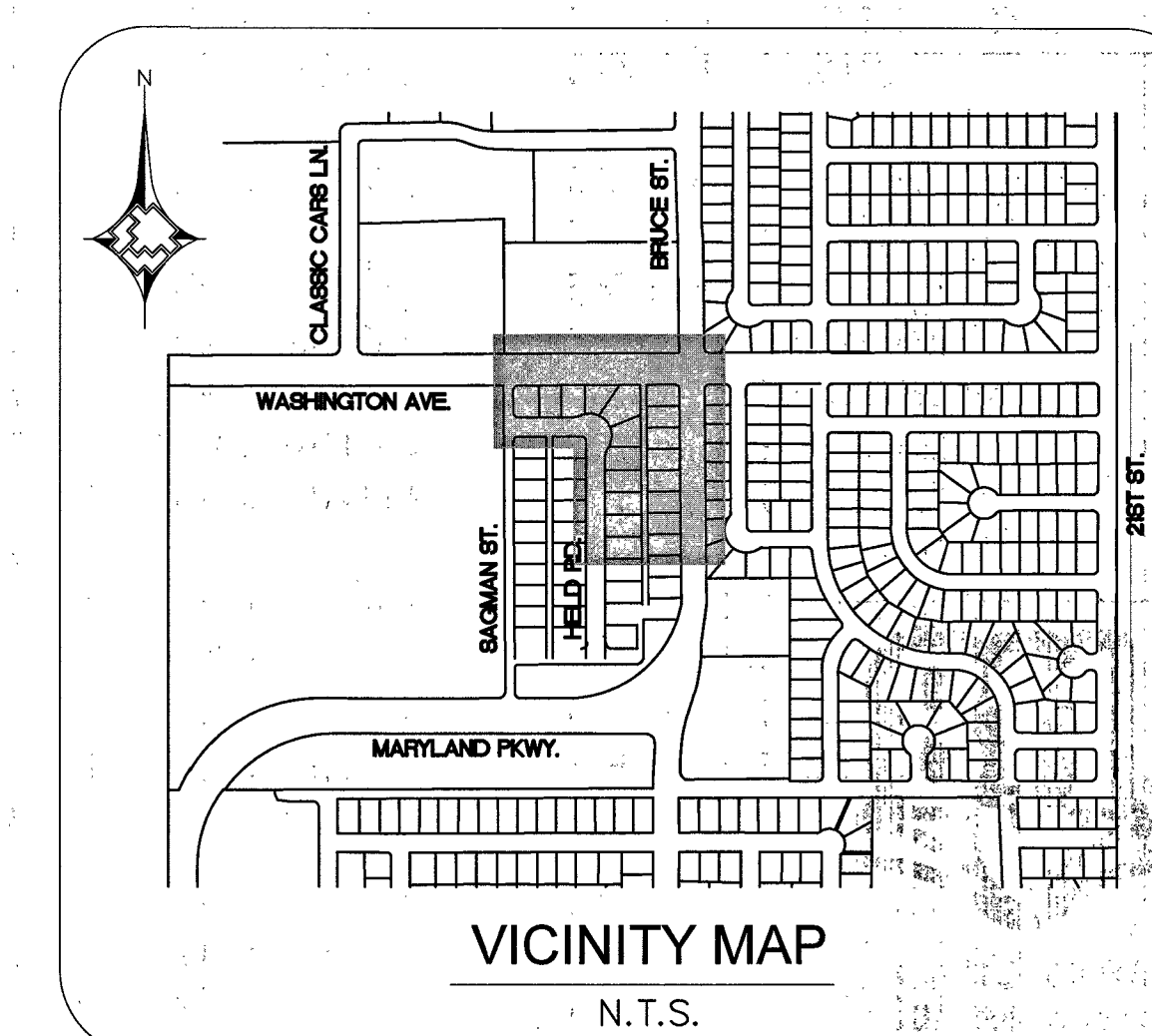
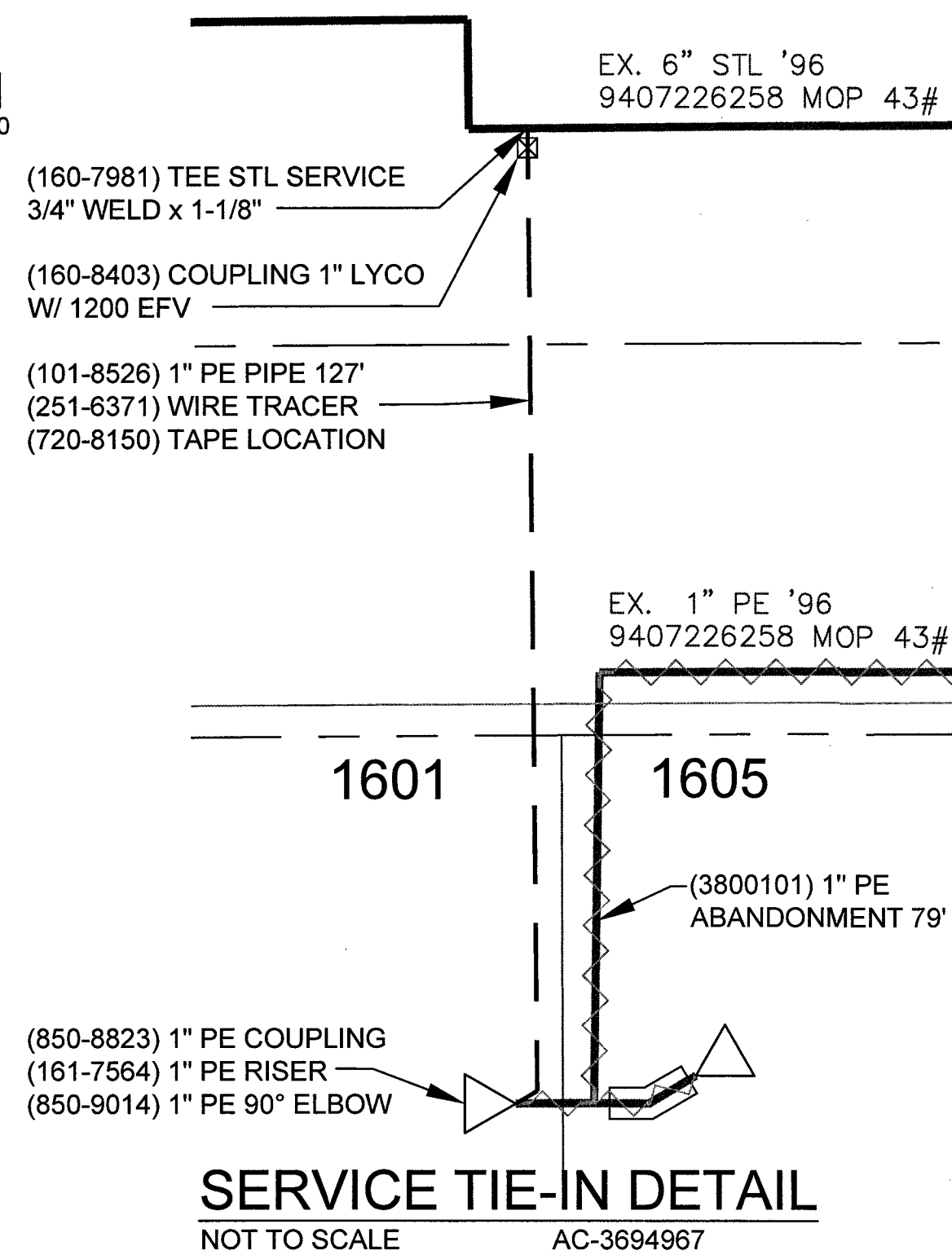
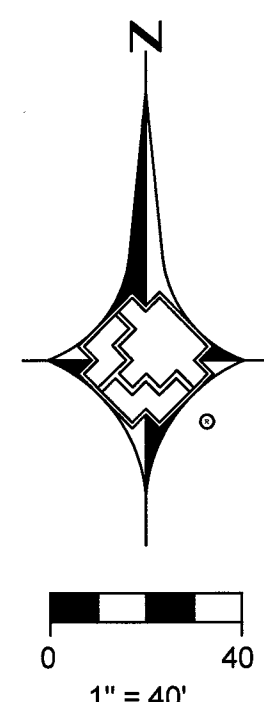
GIR 2019-CLV-WASHINGTON AND BRUCE ABBREVIATION & NOTES

MATERIAL LIST FOR PROPOSED DISTRIBUTION FACILITIES				
ITEM#	QTY. (DESIGN)	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
①	1		140-3060	2" PE CAP



MATERIAL LIST FOR ABANDONED FACILITIES				
ITEM#	QTY. (DESIGN)	QTY. (AS-BUILT)	STOCK ID#	DESCRIPTION
1	532'		3760602	ABANDON EX. 2" PVC '66 MOP 43#
2	25'		3760102	ABANDON EX. 2" PE '96 MOP 43#
3	34'		3800101	ABANDON EX. 1/2" PVC '75 SVC
4	10'		3800101	ABANDON EX. 1/2" PVC '67 SVC
5	329'		3800101	ABANDON EX. 1" PE '96 MOP 43#

DOC_3468309

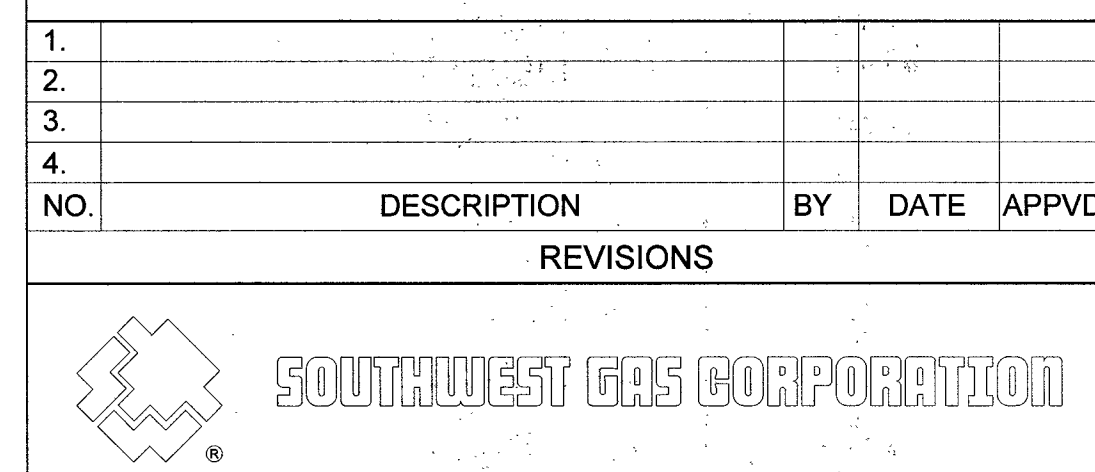


ITEM#	STOCK ID#	DESCRIPTION
1	140-3060	PROPOSED 2" PE CAP

ITEM#	STOCK ID#	DESCRIPTION
[1]	3760102	ABANDON EX. 2" PVC '66 MOP 43#
[2]	3760602	ABANDON EX. 2" PE '96 MOP 43#
[3]	3800101	ABANDON EX. 1/2" PVC '75 SVC
[4]	3800101	ABANDON EX. 1/2" PVC '67 SVC.
[5]	3760101	ABANDON EX. 1" PE '96 MOP 43#

A1 503

A2 500.3



PROPERTY SHEET UNITS							
TAX CODES	UNIT NO.	UNIT TYPE	INSTL. PROPOSED	RETIRED	INSTL. COMPLETED	RETIRED	
SEE SHEET 3							

AS-BUILT DRAWING-PRESSURE TEST DATA

	TEST METHOD	TEST METHOD
PIPE DIA. _____	☐ AIR	☐ GAUGE
PIPE LENGTH _____	☐ NITROGEN	☐ CHART
PIPE TYPE _____	☐ WATER	GAUGE/
MIN. DURATION _____	SOAP	PRESS REC SN# _____
TEST PRES. (PSIG) (MAX) _____		(MIN) _____
TIME (MIN) _____		(STOP) _____
DATE (START) _____		(STOP) _____
PERFORMED BY: _____		
SNG VERIFIED BY: _____		

INDIVIDUAL PERFORMING VISUAL INSPECTION VISUAL INSPECTION CERTIFICATION I HAVE VISUALLY INSPECTED ALL HEATED PIPINGS, SOLVENT CEMENT, MECHANICAL JOINTS AND BELLS THAT I HAVE	
NAME _____	DATE _____
SEE SHEET 3	
AS-BUILTS ACCEPTED BY _____	DATE _____
POSTED BY _____	DATE _____
POSTING QC'D BY _____	DATE _____

CONSTRUCTION

INSPECTOR _____

FOREMAN _____

REVIEWED BY _____

SEE SHEET 3

PERMIT INFORMATION

CITY OF LAS VEGAS

TAX CODE 02-0200

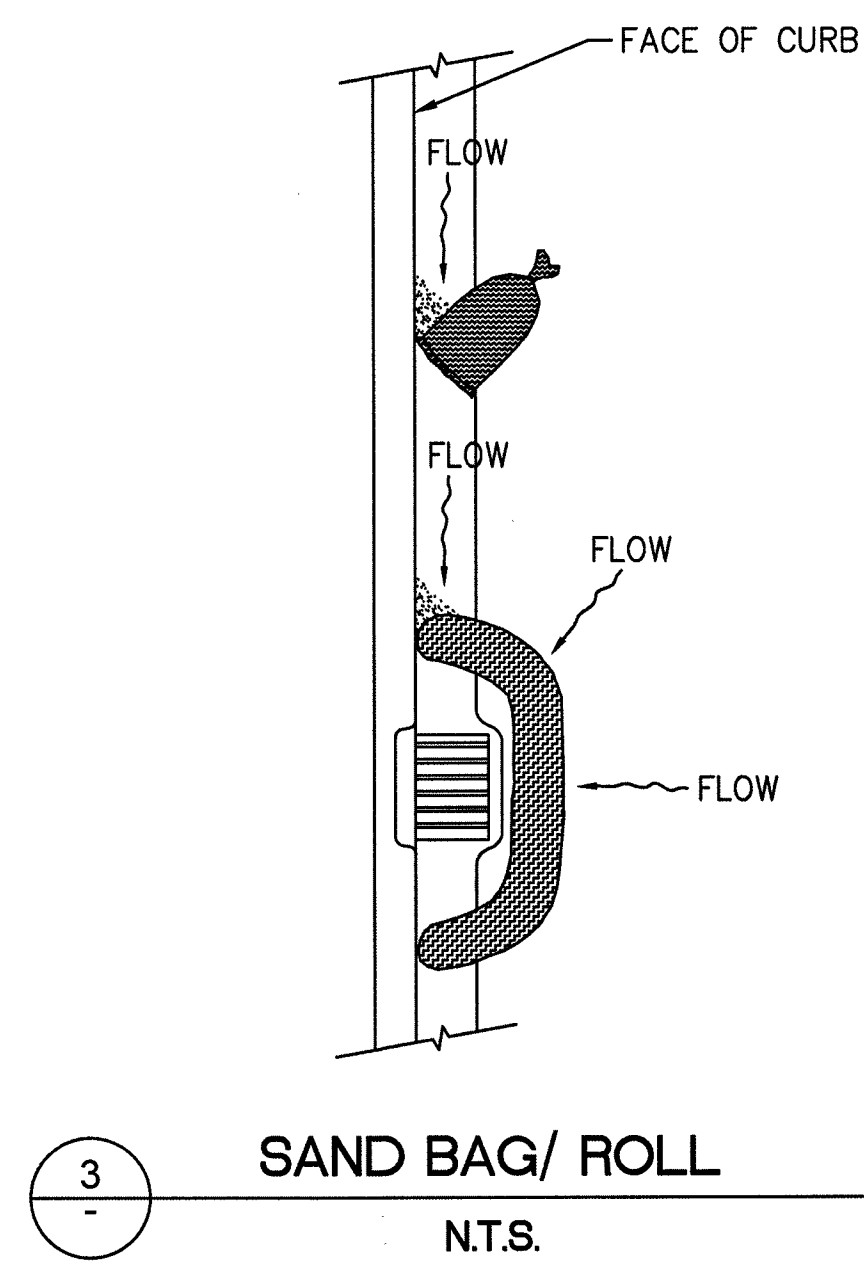
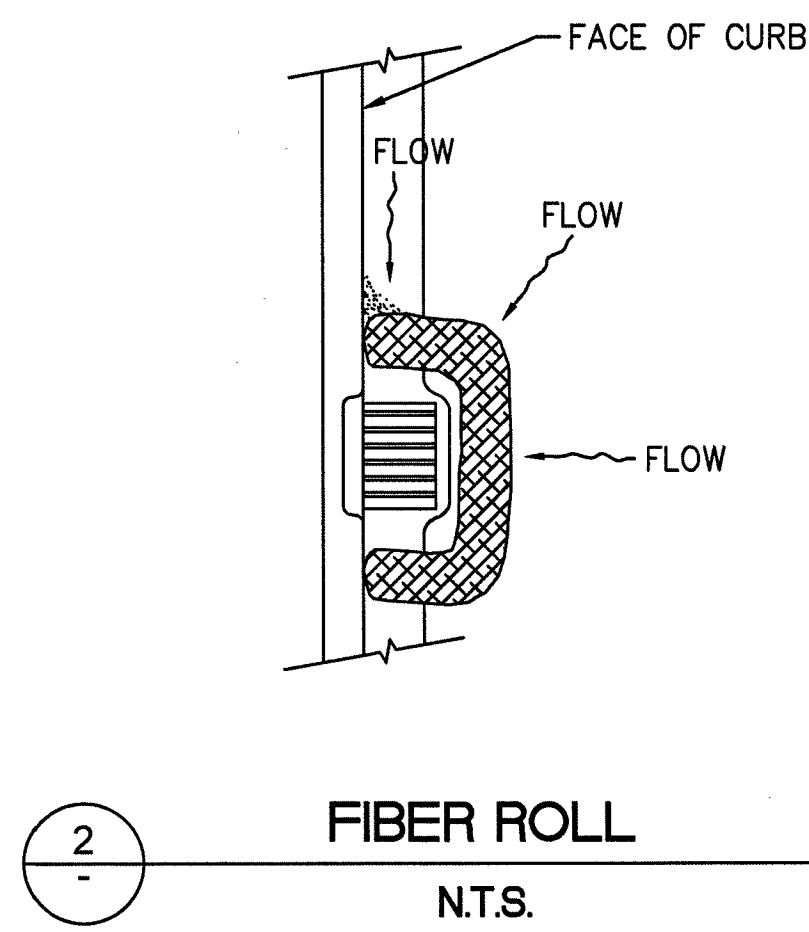
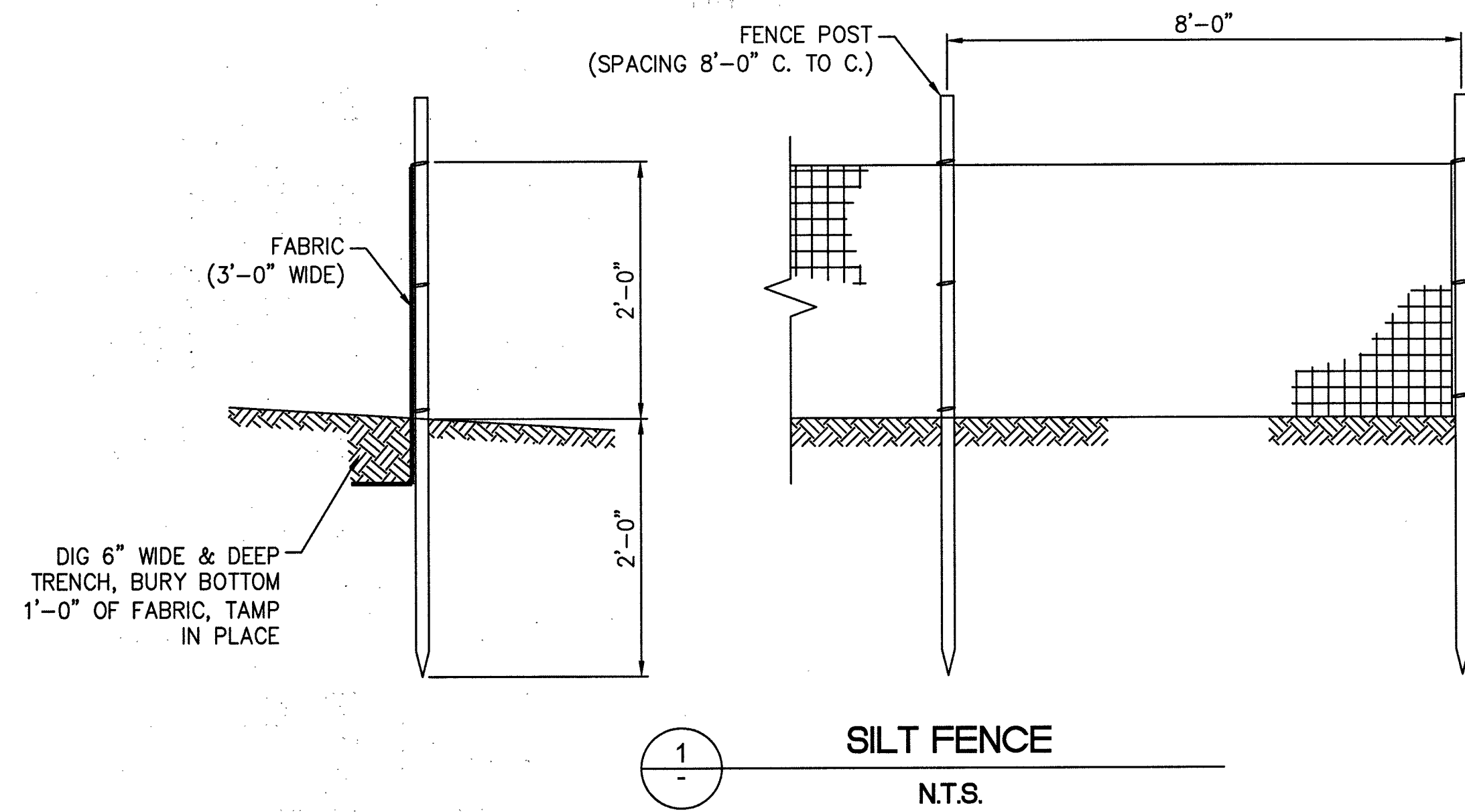
ISOLATION AREA	W.R. NO.
ISO_21_DIST_093	3468309 AC-3694967
LOCATION	ATLAS #/TITLE #
SEC 26 T20S R61E	x633y520
M.D.M.	

ENGINEER/TECH: RAMILO MENDOZA		PHONE: 702-365-2189
ACCOUNT REP:		PHONE:
PROJECT CONTACT:		PHONE:
SHEET NO: 4 OF 5	SCALE: 1"=40"	DATE: 08/14/2018
DWN. BY: ESI	CHKD. BY:	APPVD. BY:

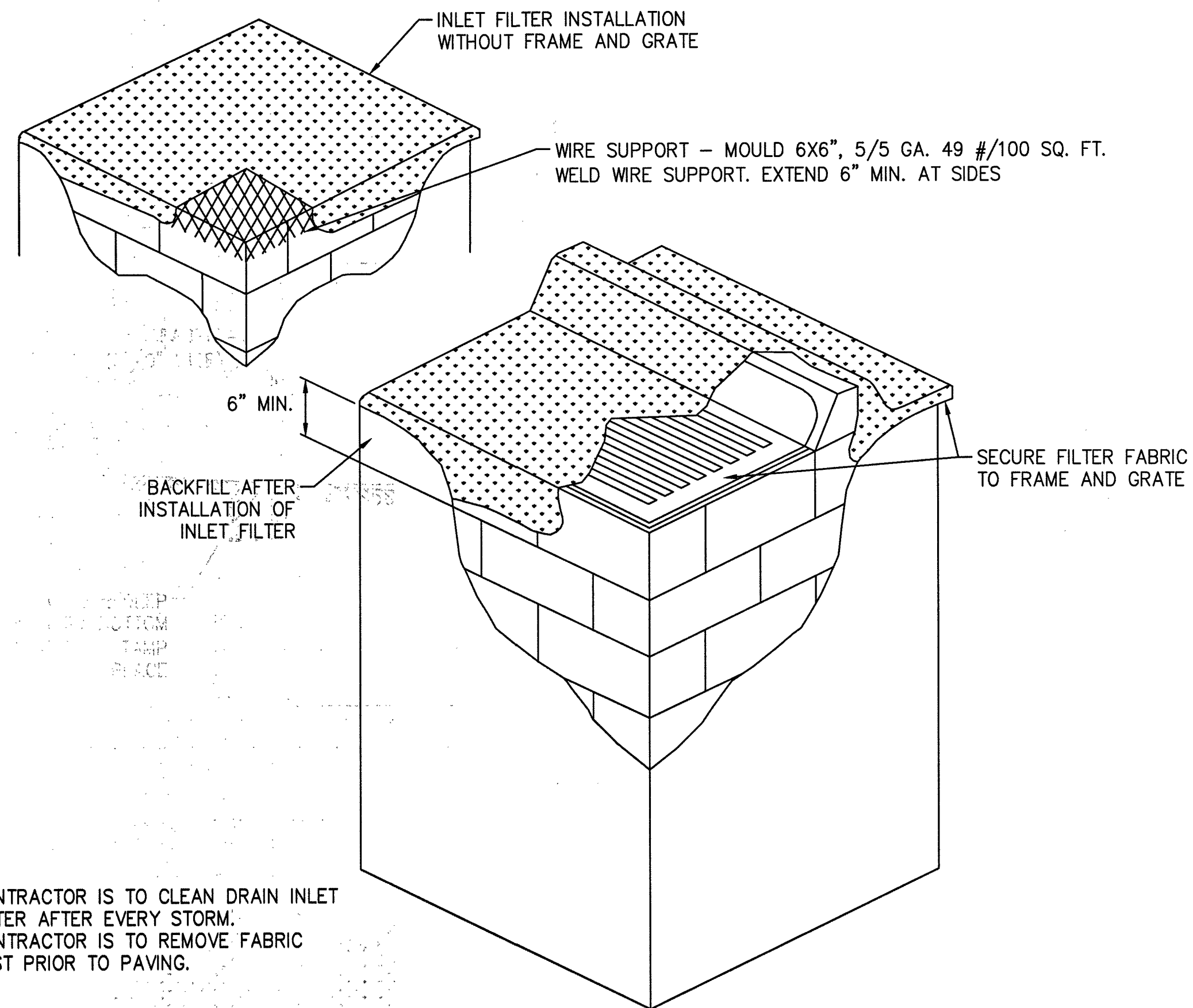
TITLE

**GIR 2019-CLV-WASHINGTON AND BRUCE
DESIGN PLAN**

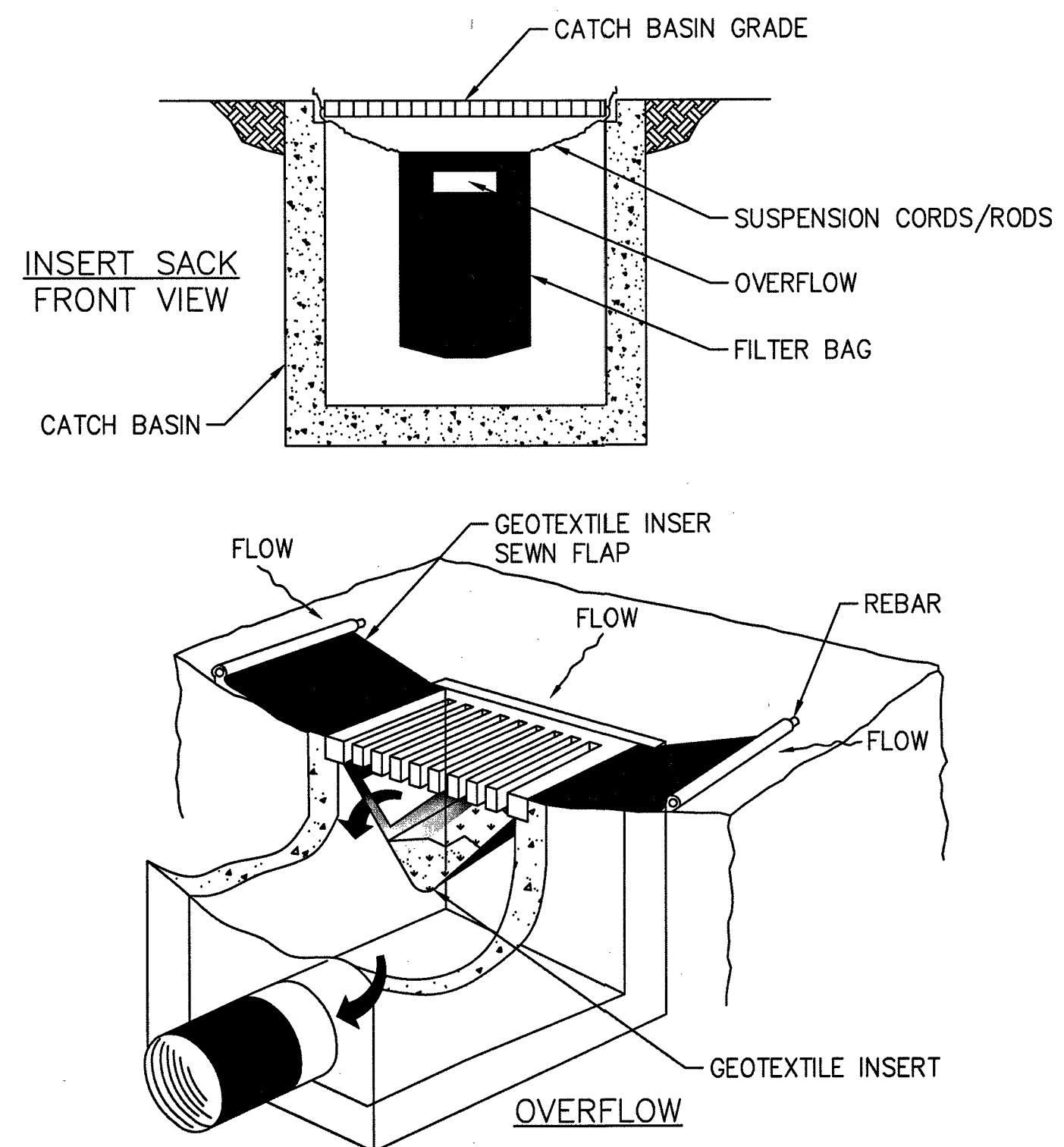
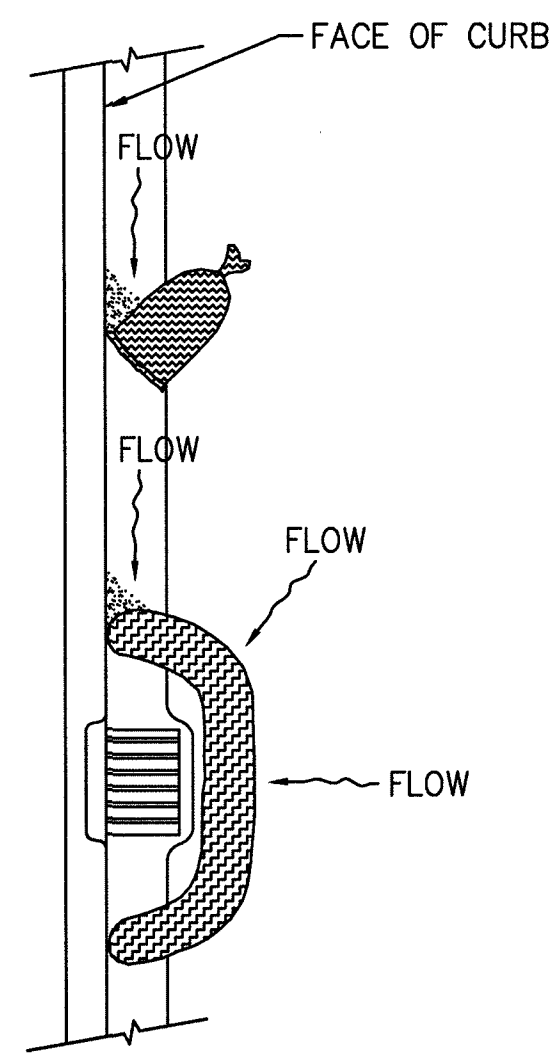
TYPICAL SWPPP BMP DETAILS



1. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL INSTALL ONE OF THE APPROPRIATE BMPS FOR THE PROTECTION OF EXISTING STORM DRAIN INLETS, WITHIN OR SIGNIFICANTLY NEAR ANY IMPROVED RIGHT-OF-WAY, FROM DEBRIS AND SEDIMENT RESULTING FROM CONSTRUCTION OF NATURAL GAS FACILITIES.
2. SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM, USING BEST MANAGEMENT PRACTICES DETAILED ON THIS SHEET.
3. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF SOUTHWEST GAS CORPORATION, IT'S CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE LISTED BMPS ON THIS SHEET DOT NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CLARK COUNTY CODE - CHAPTER 24.40/STORM SEWER SYSTEM DISCHARGE AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
4. ACCUMULATED SEDIMENT IN BMPS SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.



- NOTE:
1. CONTRACTOR IS TO CLEAN DRAIN INLET FILTER AFTER EVERY STORM.
 2. CONTRACTOR IS TO REMOVE FABRIC JUST PRIOR TO PAVING.



- NOTE:
RECESSED CURB INLET MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS.
SIZE OF FILTER FABRIC INLET SACK TO BE DETERMINED BY MANUFACTURER.

[illegible]