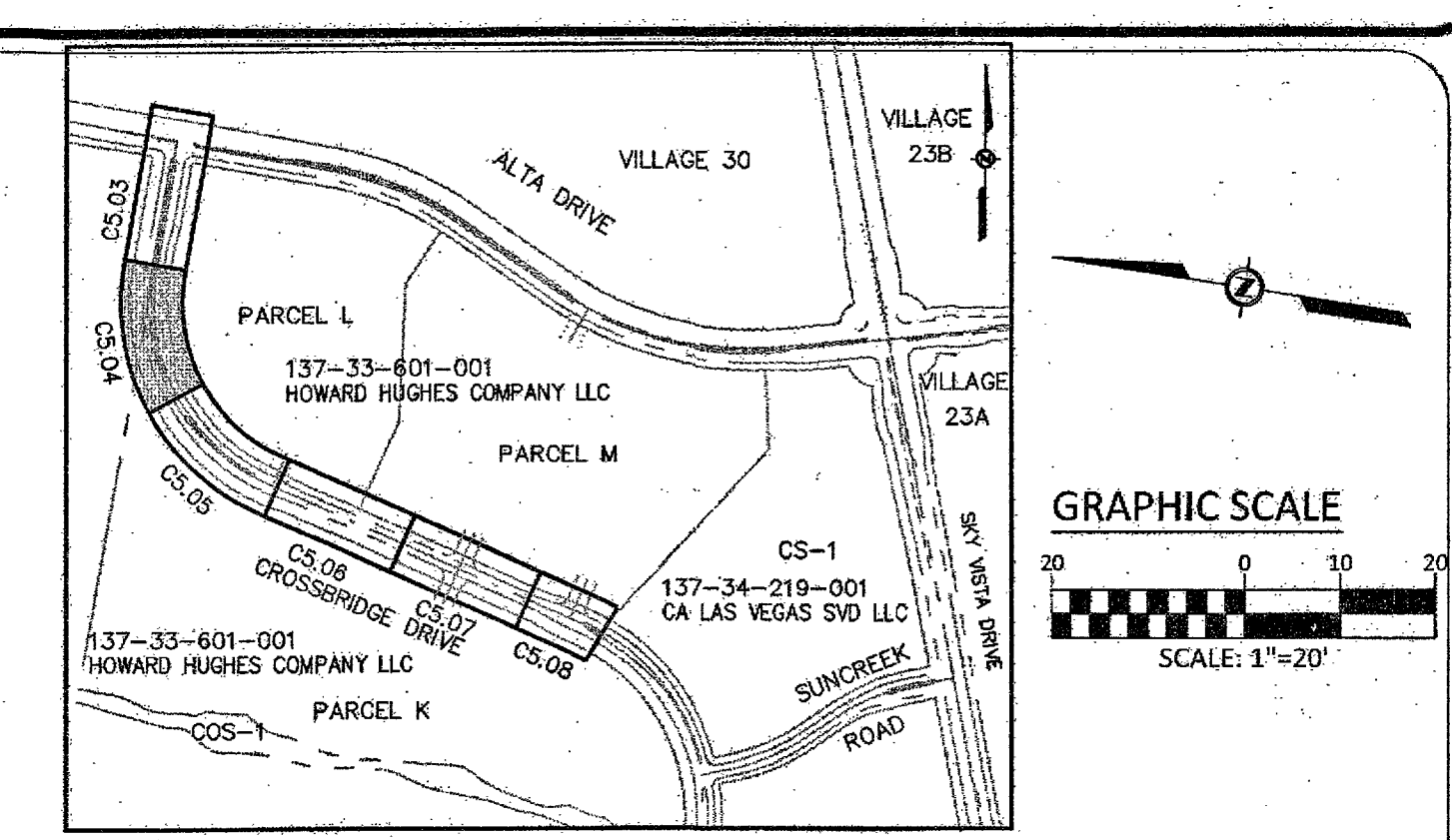
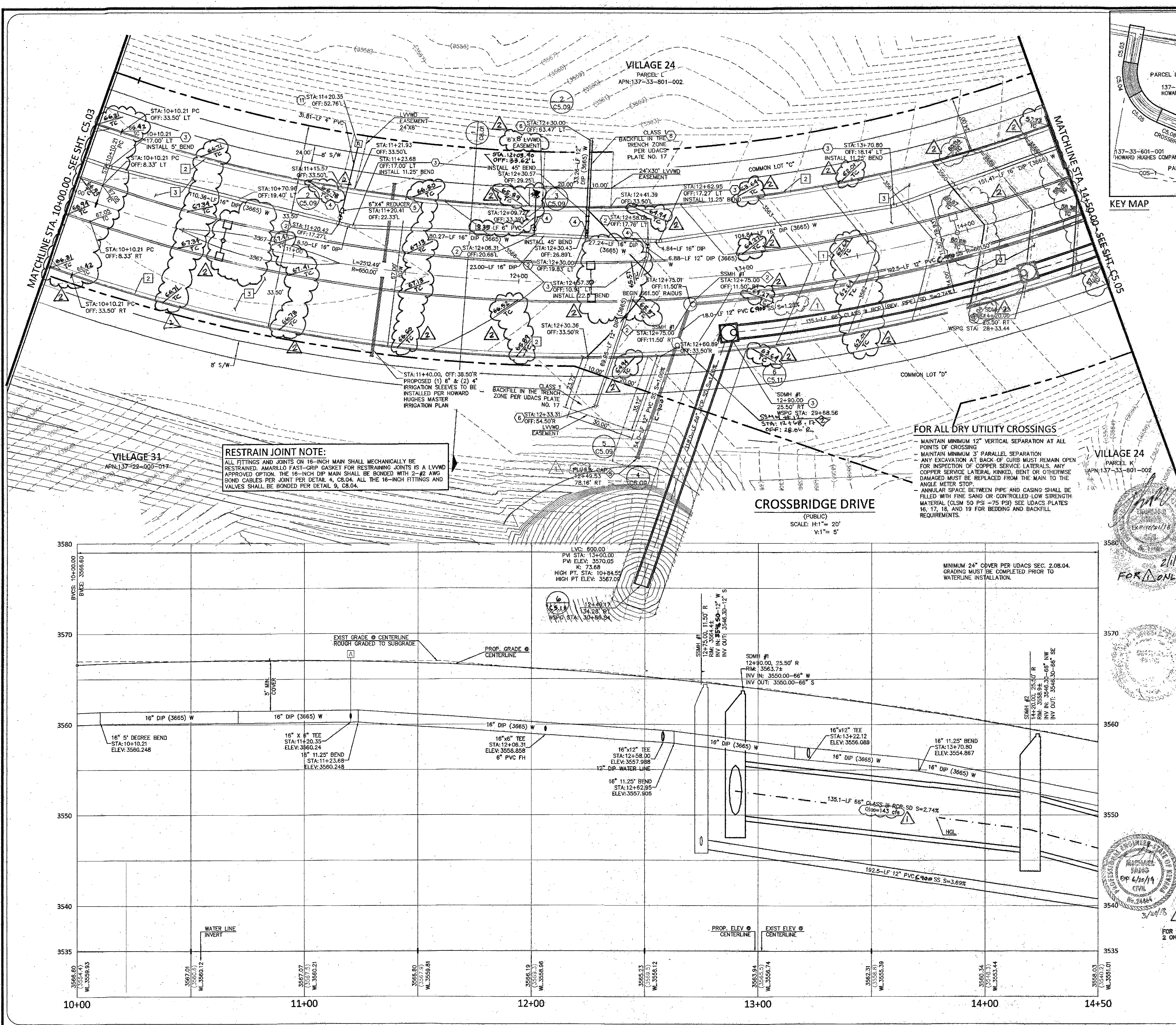




- CONSTRUCTION NOTES:**
- ITEM: USDOCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
 - INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219
 - INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216
 - INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
 - INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
 - VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION
- WATER CONSTRUCTION NOTES:** 16" WATER MAIN WITH RESTRAINED JOINTS (*)
- ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS
 - INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" GV) PER UDACS PLT. NO. 40 OR 41
 - INSTALL TEE PER UDACS PLT. NO. 31 (*)
 - INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR 4) (*)
 - INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
 - INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
 - INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
 - INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
 - CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 18
 - INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
 - REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
 - INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
 - INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 6 & DETAIL SHEET C5.02 (BRASS BETWEEN METER & RPPA)
 - INSTALL CROSS PER UDACS PLT. NO. 31 (*)
- SEWER CONSTRUCTION NOTES:**
- ITEM: DCSWCS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
 - INSTALL 18" SEWER MANHOLE WITH SINGLE LID **NOT USED**
 - INSTALL 60" SEWER MANHOLE WITH SINGLE LID
 - INSTALL 18" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 - INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 - INSTALL TEMPORARY PLUG AND CAP SEWER STUB
 - INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER DCSWCS 4.9.7
 - REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE
- STORM DRAIN CONSTRUCTION NOTES:**
- ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS
 - INSTALL TYPE 2 MODIFIED "CM2" DROP INLET PER USDOCA DWG. NO. 412.1
 - NOT USED
 - INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET C8.02
 - INSTALL JUNCTION STRUCTURE
 - INSTALL PRECAST MANHOLE TEE W/ 48" RISER
 - INSTALL PRECAST MANHOLE TEE W/ 60" RISER
 - INSTALL PRECAST ELBOW (SEE PLAN FOR 4)
 - INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
 - NOT USED
 - INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
 - NOT USED**
 - REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE
 - CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE
- SEWER CONNECTION NOTE:**
- ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.
- WATER MAIN JOINT DEFLECTION (DIP 14"-24")**
- DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY. FOR PUSH-ON AND MECHANICAL TYPE DIP JOINTS, MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 600 FEET FOR 18 FEET OF PIPE LENGTHS AND 765 FEET FOR 20 FEET PIPE LENGTHS, PER UDACS 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.
- APPROVED FOR CONSTRUCTION**
- LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/31/17 PROJECT NO: 124806
LVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

COLLINS ENGINEERS
3130 S. DURANGO DR. SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
WWW.COLLINSENGINEERS.COM

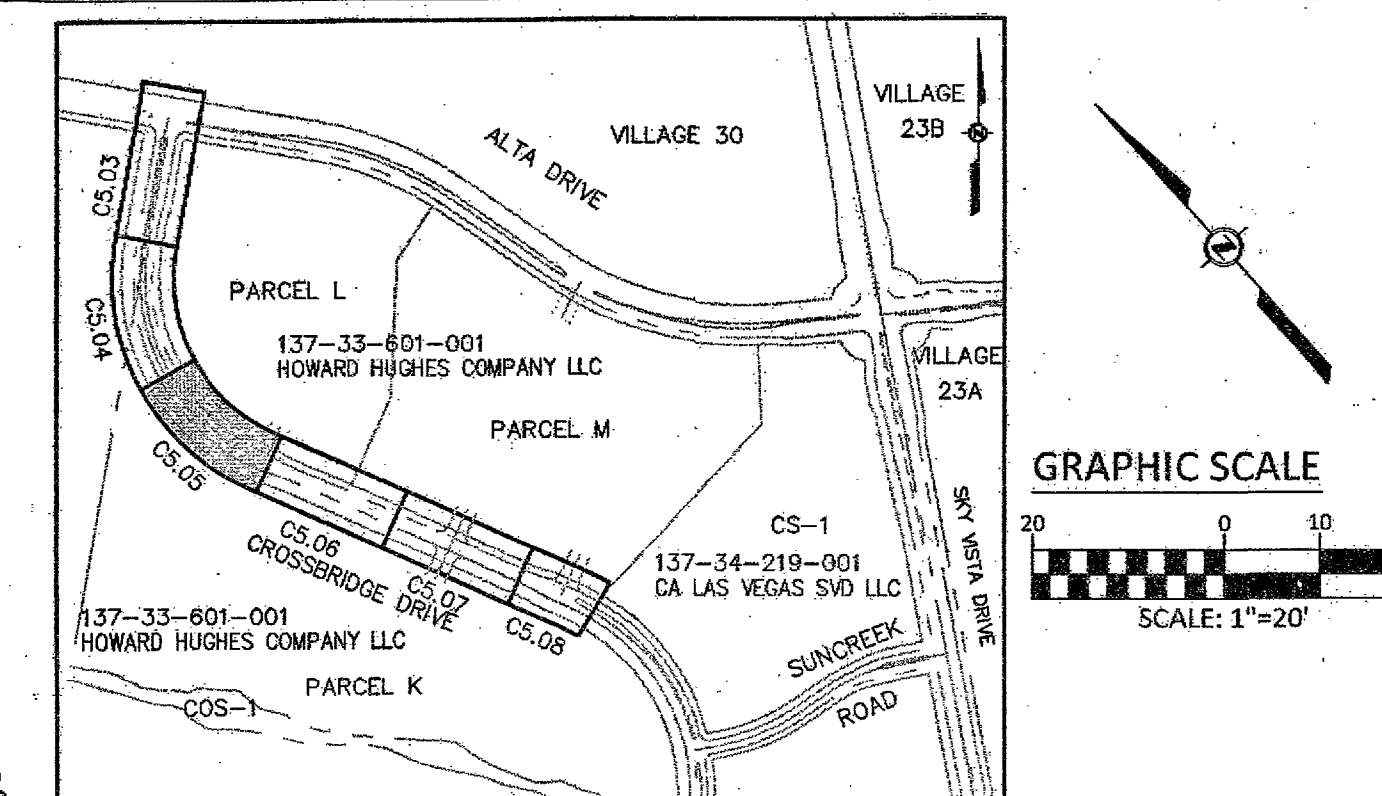
PROFESSIONAL ENGINEER - STATE OF NEVADA
JAMES A. JANCY
EXP. 06-21-18
CIVIL
NO. 016109
02-24-17

IMPROVEMENT PLANS FOR THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 10+00.00 TO 14+50.00
SUMMERLIN VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SADIVAR	REVISED SS INFO. APPD BY: J.M. 2/2/18
2	02/12/18	J. SADIVAR	REVISED PL LOCATION, ADJUSTED ST. POINTS, APPD BY: J.M. 5/1/18

CEI PROJECT: 9108
DESIGN BY: J. SADIVAR
DRAWN BY: J. SADIVAR
CHECKED BY: K. YAMADA
DATE: 04/20/17
SCALE: 1" = 20'
SHEET NUMBER: C5.04
107V 7063
SHEET 9 OF 26
H45276

PROJ#: 124806 AGR:18009 QS:137-33-NE XC:1339



CONSTRUCTION NOTES:	
NO.	ITEM: USDCCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
[1]	INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219
[2]	INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216
[3]	INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
[4]	INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
[5]	VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF

DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION	
WATER CONSTRUCTION NOTES: 16" WATER MAIN WITH RESTRAINED JOINTS (*)	
NO. ITEM:	UDACS PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS
(1)	INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" GV) PER UDACS PLT. NO. 40 OR 41
(2)	INSTALL TEE PER UDACS PLT. NO. 31 (*)
(3)	INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR L) (*)
(4)	INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
(5)	INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
(6)	INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
(7)	INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
(8)	CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 18
(9)	INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
(10)	REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
(11)	INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
(12)	INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 8 & DETAIL SHEET CS.02 (BRASS BETWEEN METER & RPPA)
(13)	INSTALL CROSS PER UDACS PLT. NO. 31 (*)

• SEE PLANS AND NOTE ATTACHED PIPE SIZE FOR TEE, BEND, GATE VALVE, REDUCER AND CAP SIZES

SEWER CONSTRUCTION NOTES:

NO.	ITEM: DCSWC DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
1	INSTALL 48" SEWER MANHOLE WITH SINGLE LID NOT USED
2	INSTALL 60" SEWER MANHOLE WITH SINGLE LID
3	INSTALL 48" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
4	INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
5	INSTALL TEMPORARY PLUG AND CAP SEWER STUB
6	INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER DCSWCs 4.9.7
7	REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE

STORM DRAIN CONSTRUCTION NOTES:	
NO.	ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR CULVERT SYSTEMS.
1	INSTALL TYPE 2 MODIFIED "CM2" DROP INLET PER UDSCCA DWG. NO. 412.1
2	AND 421
3	NOT USED
4	INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET CB.02
5	INSTALL JUNCTION STRUCTURE
6	INSTALL PRECAST MANHOLE TEE W/ 48" RISER
7	INSTALL PRECAST MANHOLE TEE W/ 60" RISER
8	INSTALL PRECAST ELBOW (SEE PLAN FOR $\angle$)
9	INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
10	NOT USED
11	INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
12	NOT USED
13	REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE
** CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE	

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNTOWN SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND IS ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNTOWN SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNTOWN SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER MAIN JOINT DEFLECTION (DIP, 14"-24")

DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY, FOR PUSH-ON AND MECHANICAL JOINT JOINTS, MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 890 FEET FOR 18 FEET OF PIPE LENGTHS AND 785 FEET FOR 20 FEET PIPE LENGTHS, PER USACS 2.07.03, DEFLECTION, FITTINGS IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

APPROVED FOR CONSTRUCTION

Nishori, P.

LAS VEGAS VALLEY-WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE 8/31/17 PROJECT NO: 124806

LYVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

**COLLINS
ENGINEERS**

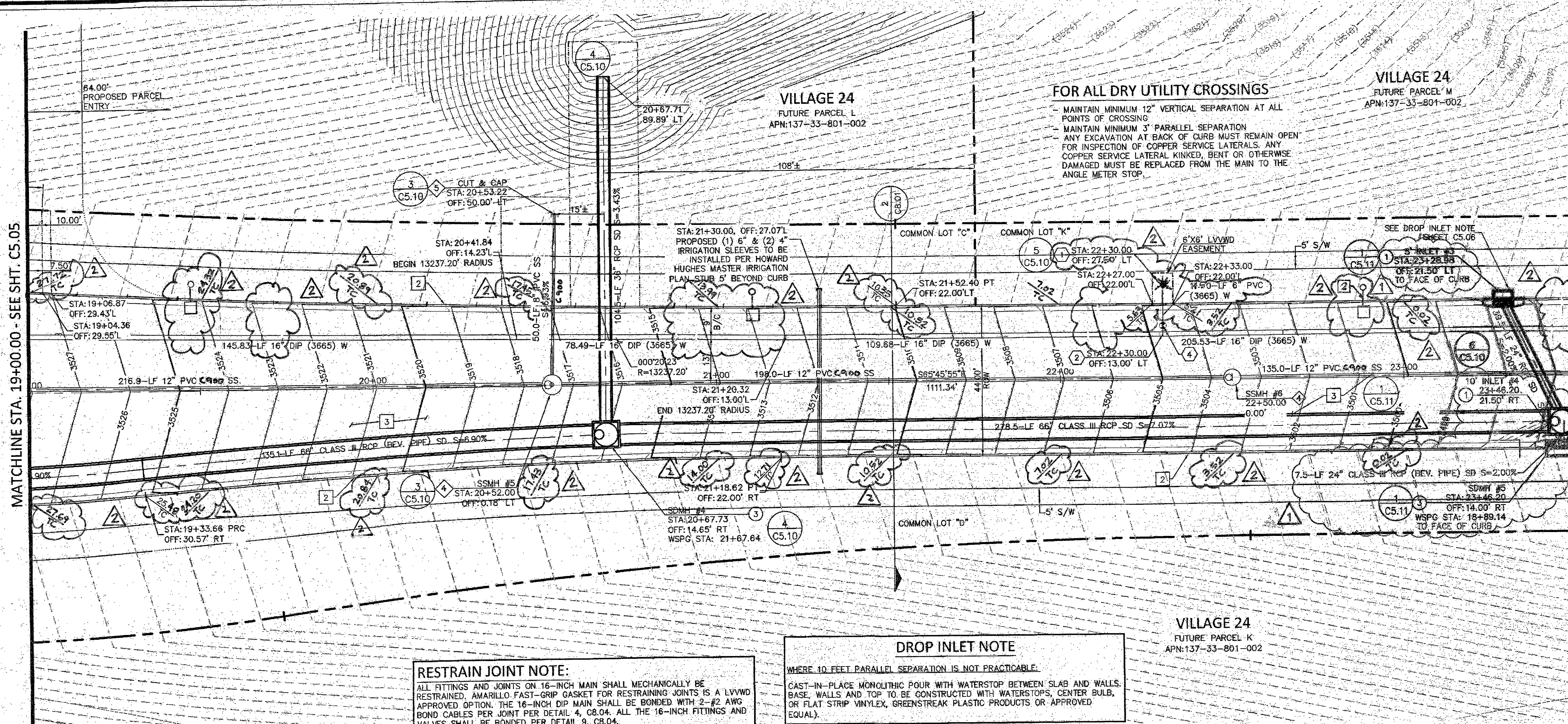
3130 S. DURANGO DR., SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
www.collinsengr.com

PROFESSIONAL ENGINEER - STATE OF NEVADA
 JAMES A. YANCEY
 EXP. 06-30-18
 CIVIL
 NO. 016108

IMPROVEMENT PLANS FOR
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 14+50.00 TO 19+00.00
SUMMERLIN VILLAGE 2 - CROSSROADS DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/22/17		ADDED SD INFO APPROX 87' LONG 21.5' WIDE
2	02/12/18	APD BY Jm 2/12/18	RECEIVED PA LOCATION, ADJUSTED BY LIGHTS, ADJUSTED TO ELEV 140.5' 4/2/18

CEI PROJECT:	9106
DESIGN BY:	J. SALDIVAR
DRAWN BY:	J. SALDIVAR
CHECKED BY:	K. YAMADA
DATE:	04/2017
SCALE:	1" = 20'
SHEET NUMBER	
C5 05	
10747053	
SHEET 10 OF 26	
H165276	



KEY MAP

CONSTRUCTION NOTES:

1. ITEM: USDOCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
2. INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219.
3. INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216.
4. INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
5. INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
6. VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION

WATER CONSTRUCTION NOTES: 16" WATER MAIN WITH RESTRAINED JOINTS (*)

1. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS
2. INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" GV) PER UDACS PLT. NO. 40 OR 41
3. INSTALL TEE PER UDACS PLT. NO. 31 (*)
4. INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR -J) (*)
5. INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
6. INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
7. INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 38 (*)
8. INSTALL 6" MANUAL BLOW-OFF ASSY PER UDACS PLT. NO. 37
9. CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 19
10. INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
11. REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
12. INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
13. INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 8 & DETAIL SILET C5.02 (BRASS BETWEEN METER & RPPA)
14. INSTALL GROSS PER UDACS PLT. NO. 31 (*)

* SEE PLANS AND NOTE ATTACHED PIPE SIZE FOR TEE, BEND, GATE VALVE, REDUCER AND CAP SIZES

SEWER CONSTRUCTION NOTES:

1. ITEM: DCSWCS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
2. ~~INSTALL 48" SEWER MANHOLE WITH SINGLE LID~~ NOT USED
3. INSTALL 60" SEWER MANHOLE WITH SINGLE LID
4. ~~INSTALL 48" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID~~
5. ~~INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID~~
6. INSTALL TEMPORARY PLUG AND CAP SEWER STUB
7. INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER DCSWCS 4.9.7
8. REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE

STORM DRAIN CONSTRUCTION NOTES:

1. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS
2. INSTALL TYPE 2 MODIFIED "OM2" DROP INLET PER USDOCA DWG. NO. 412.1 AND 421
3. NOT USED
4. INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET C8.02
5. INSTALL JUNCTION STRUCTURE
6. INSTALL PRECAST MANHOLE TEE W/ 48" RISER
7. INSTALL PRECAST MANHOLE TEE W/ 60" RISER
8. INSTALL PRECAST ELBOW (SEE PLAN FOR -J)
9. INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
10. NOT USED
11. NOT USED
12. REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE

* CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE

SEWER CONNECTION NOTE:

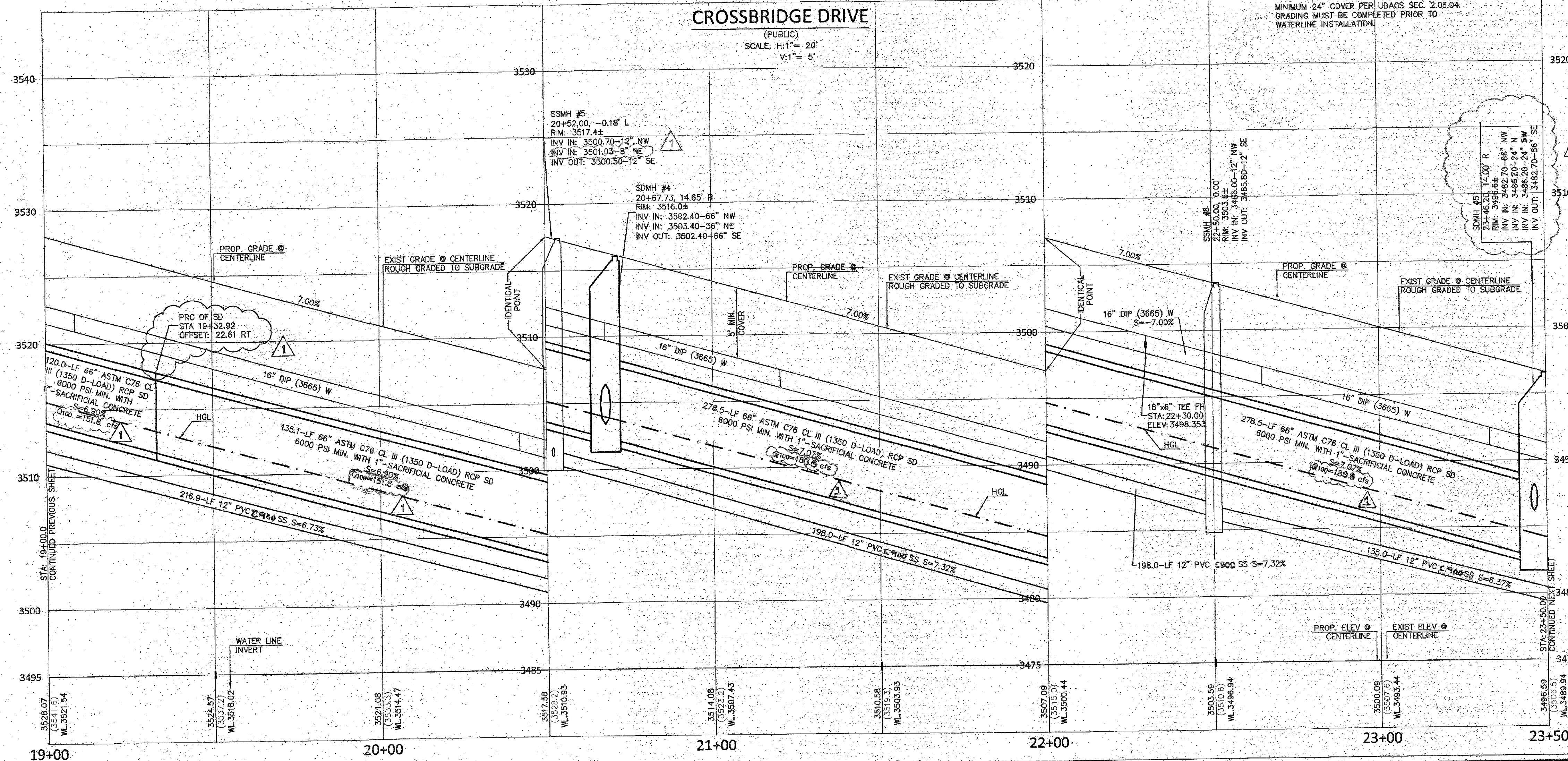
ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER MAIN JOINT DEFLECTION (DIP 14"-24")

DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY, FOR PUSH-ON AND MECHANICAL TYPE DIP JOINTS, MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 600 FEET FOR 18 FEET OF PIPE LENGTHS AND 765 FEET FOR 20 FEET PIPE LENGTHS, PER UDACS 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 1/13/17 PROJECT NO: 124806
LVWD APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL



DESIGN BY: J. SALDIVAR
DRAWN BY: J. SALDIVAR
CHECKED BY: K. YAMADA
DATE: 04/20/17
SCALE: 1" = 20'
SHEET NUMBER: C5.06
107Y7963
SHEET 11 OF 26
H65276

COLLINS ENGINEERS
3130 S. DURANGO DR., SUITE 404
LAS VEGAS, N.V. 89117
PHONE: (702) 248-8000
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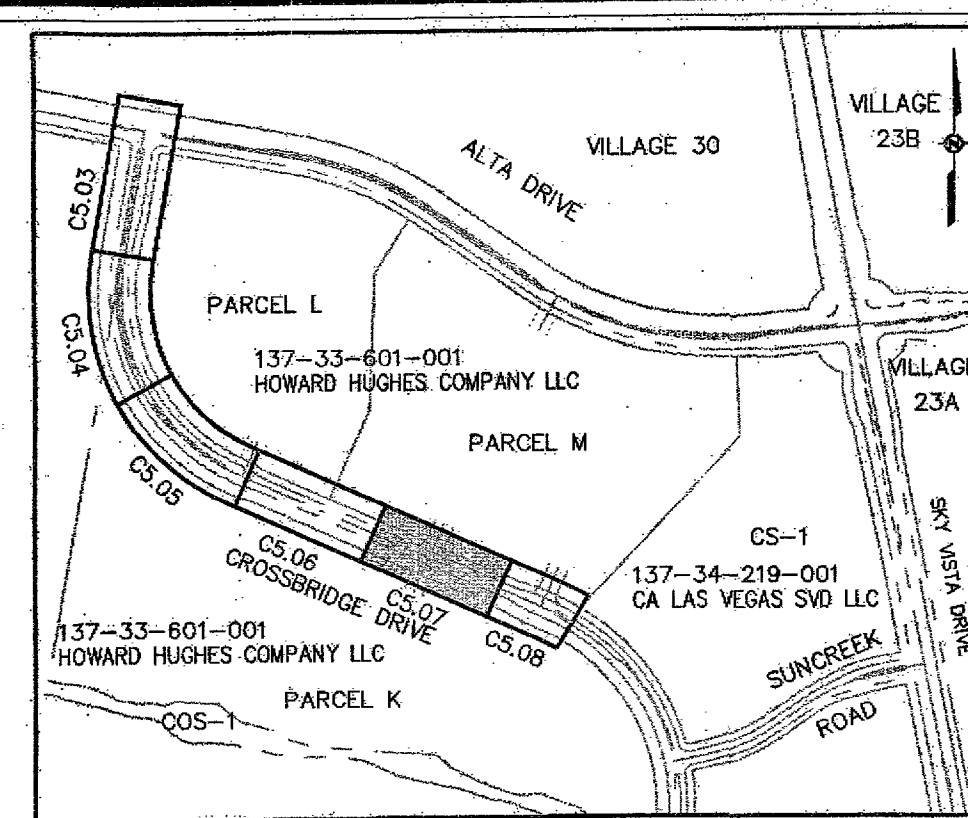
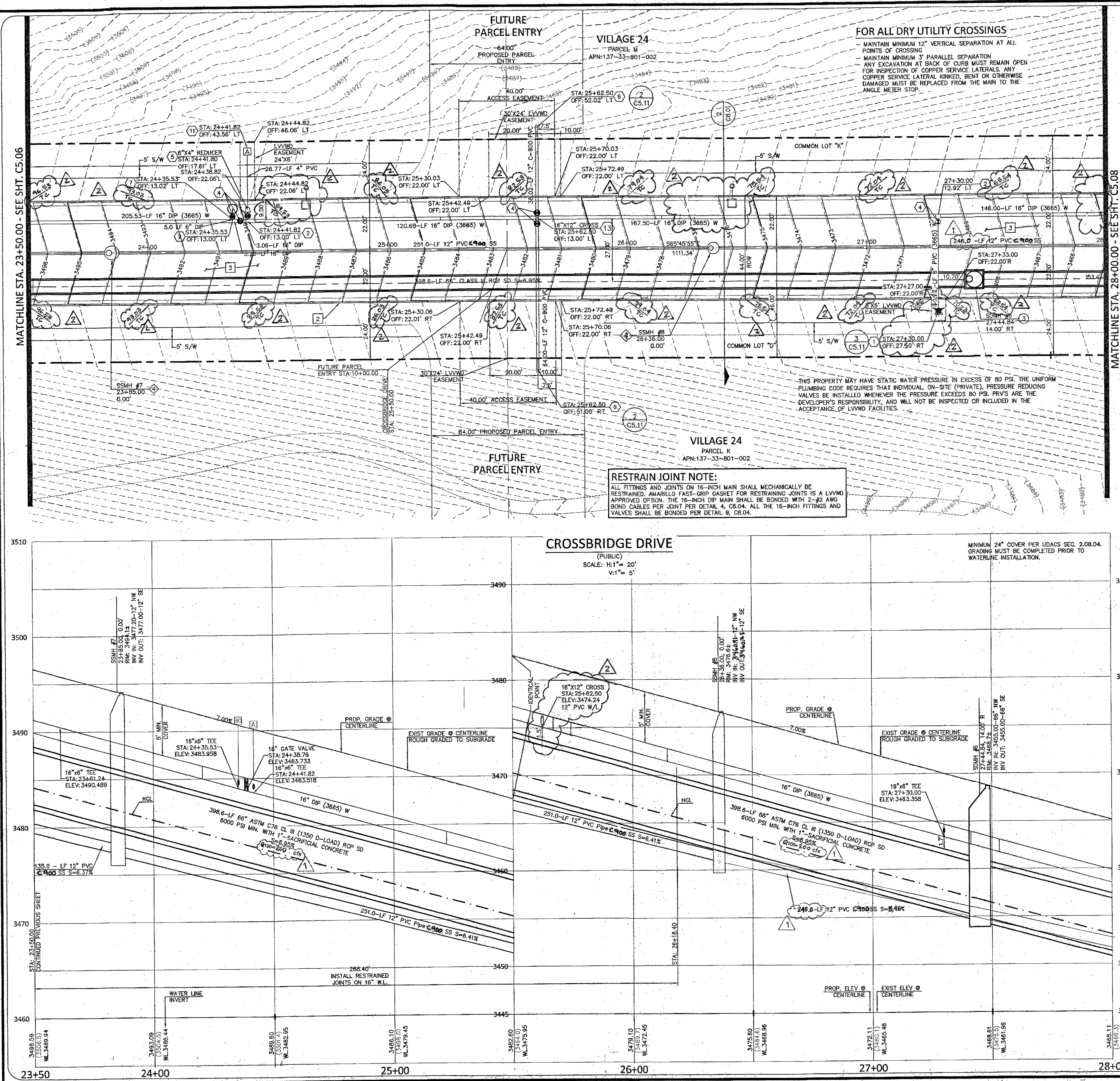
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 19+00.00 TO 23+50.00
SUMMERLIN VILLAGE 24 CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

PROFESSIONAL ENGINEER - STATE OF NEVADA
JAMES A. YANCEY
EXP. 08-2018
NO. 018109
8/23/17

DESCRIPTION
REVISED SS & SD LOCATION Aff'd By: Jm 2/27/18
REVISED FH LOCATION, ADJUSTED ST DIBITS
REVISED TO ELEV 1000.00 4/11/18

DESIGN BY: J. SALDIVAR
DRAWN BY: J. SALDIVAR
CHECKED BY: K. YAMADA
DATE: 04/20/17
SCALE: 1" = 20'
SHEET NUMBER: C5.06
107Y7963
SHEET 11 OF 26
H65276

XC-11339
AGR-116039
Q5-137-33-NE



- CONSTRUCTION NOTES:**
- ITEM: USDOCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
 - INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219
 - INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216
 - INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
 - INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
 - VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT. IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION

- WATER CONSTRUCTION NOTES:** 16" WATER MAIN WITH RESTRAINED JOINTS (*)
- ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
 - INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" GV) PER UDACS PLT. NO. 40 OR 41
 - INSTALL TEE PER UDACS PLT. NO. 31 (*)
 - INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR 4) (*)
 - INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
 - INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
 - INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
 - INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
 - CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 19
 - INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
 - REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
 - INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
 - INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 8 & DETAIL SHEET CS.02 (BRASS BETWEEN METER & RPPA)
 - INSTALL CROSS PER UDACS PLT. NO. 31 (*)

- SEWER CONSTRUCTION NOTES:**
- ITEM: DCSWCS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS
 - INSTALL 16" SEWER MANHOLE WITH SINGLE LID NOT USED
 - INSTALL 60" SEWER MANHOLE WITH SINGLE LID
 - INSTALL 16" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 - INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 - INSTALL TEMPORARY PLUG AND CAP SEWER STUB
 - INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER DCSWCS 4.9.7
 - REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE

- STORM DRAIN CONSTRUCTION NOTES:**
- ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
 - INSTALL TYPE 2 MODIFIED "CM2" DROP INLET PER USDOCA DWG. NO. 412.1 AND 421
 - NOT USED
 - INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET CS.02
 - INSTALL JUNCTION STRUCTURE
 - INSTALL PRECAST MANHOLE TEE W/ 48" RISER
 - INSTALL PRECAST MANHOLE TEE W/ 60" RISER
 - INSTALL PRECAST ELBOW (SEE PLAN FOR 4)
 - INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
 - NOT USED
 - INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
 - NOT USED
 - REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE

SEWER CONNECTION NOTE:
ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEMED AVAILABLE FOR SERVICE.

WATER MAIN JOINT DEFLECTION (DIP 14"-24")
DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY, FOR PUSH-ON AND MECHANICAL TYPE DIP JOINTS, MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 680 FEET FOR 18 FEET OF PIPE LENGTHS AND 765 FEET FOR 20 FEET PIPE LENGTHS, PER UDACS 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/13/17
PROJECT NO: 124806
LWWD-APPROVED FIRE FLOW 1500 GPM AT 20 PSI RESIDUAL

COLLINS ENGINEERS
3130 S. DURANGO DR., SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
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WWW.COLLINSENG.COM

PROFESSIONAL ENGINEER - STATE OF NEVADA
JAMES A. YANKE
EXP. 06-20-18
NO. 016109

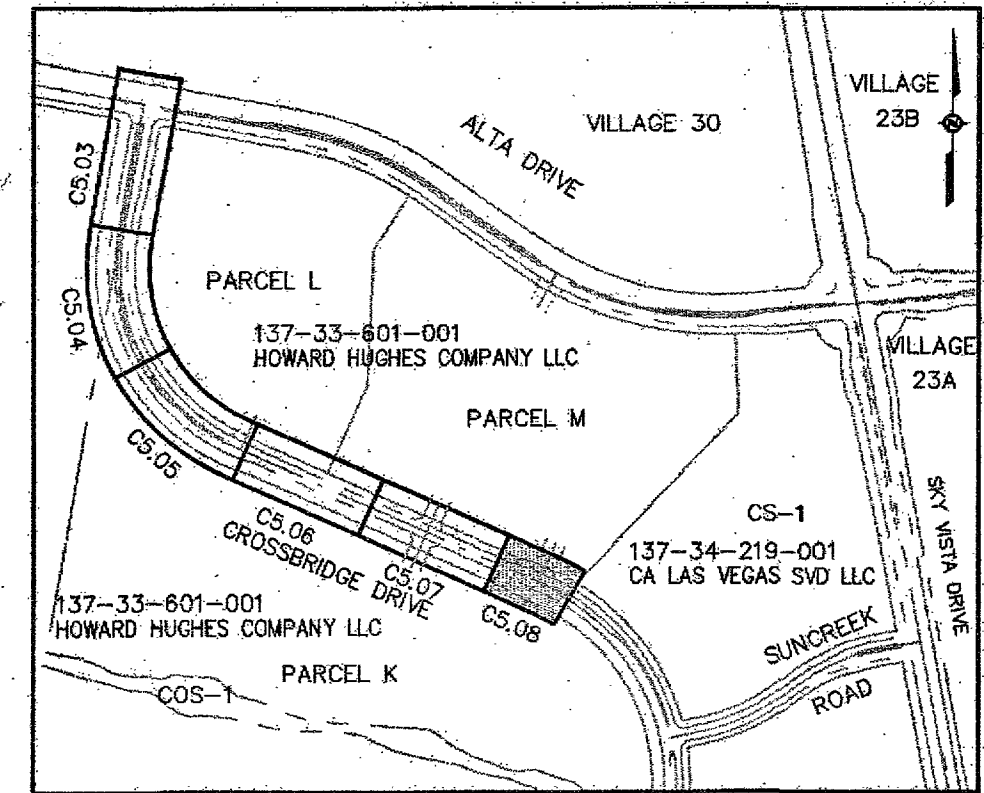
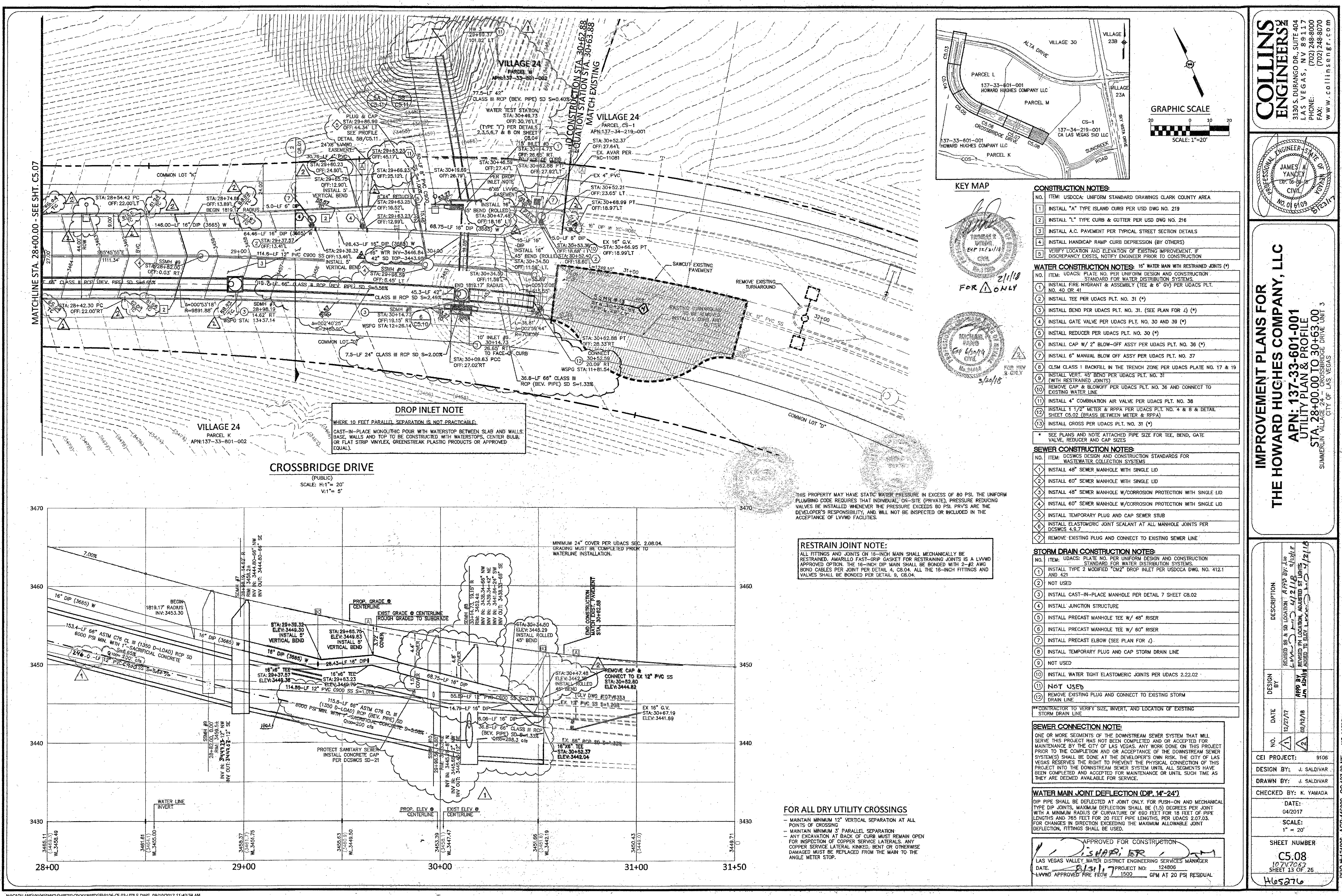
IMPROVEMENT PLANS FOR THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 23+50.00 TO 28+00.00
SUMMERLIN VILLAGE 24 CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SALDIVAR	REVISED INFO AND REVISED PLAN
2	02/13/18	J. SALDIVAR	REVISED PLAN AND PROFILE
3	02/13/18	J. SALDIVAR	REVISED PLAN AND PROFILE

CEI PROJECT: 9108
DESIGN BY: J. SALDIVAR
DRAWN BY: J. SALDIVAR
CHECKED BY: K. YAMADA

DATE: 04/20/17
SCALE: 1" = 20'
SHEET NUMBER: C5.07
SHEET 12 OF 26
465276

PROJECT: 124806 AGR-116009 OS-137-33-NE XC-11339



KEY MAP

CONSTRUCTION NOTES:

- NO. ITEM: USDOCA: UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
1. INSTALL "A" TYPE ISLAND CURB PER USD DWG NO. 219
 2. INSTALL "L" TYPE CURB & GUTTER PER USD DWG NO. 216
 3. INSTALL A.C. PAVEMENT PER TYPICAL STREET SECTION DETAILS
 4. INSTALL HANDICAP RAMP CURB DEPRESSION (BY OTHERS)
 5. VERIFY LOCATION AND ELEVATION OF EXISTING IMPROVEMENT, IF DISCREPANCY EXISTS, NOTIFY ENGINEER PRIOR TO CONSTRUCTION

WATER CONSTRUCTION NOTES:

- NO. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
1. INSTALL FIRE HYDRANT & ASSEMBLY (TEE & 6" GV) PER UDACS PLT. NO. 40 OR 41
 2. INSTALL TEE PER UDACS PLT. NO. 31 (*)
 3. INSTALL BEND PER UDACS PLT. NO. 31. (SEE PLAN FOR 4) (*)
 4. INSTALL GATE VALVE PER UDACS PLT. NO. 30 AND 39 (*)
 5. INSTALL REDUCER PER UDACS PLT. NO. 30 (*)
 6. INSTALL CAP W/ 2" BLOW-OFF ASSY PER UDACS PLT. NO. 36 (*)
 7. INSTALL 6" MANUAL BLOW OFF ASSY PER UDACS PLT. NO. 37
 8. CLSM CLASS 1 BACKFILL IN THE TRENCH ZONE PER UDACS PLATE NO. 17 & 19
 9. INSTALL VERT. 45° BEND PER UDACS PLT. NO. 31 (WITH RESTRAINED JOINTS)
 10. REMOVE CAP & BLOWOFF PER UDACS PLT. NO. 36 AND CONNECT TO EXISTING WATER LINE
 11. INSTALL 4" COMBINATION AIR VALVE PER UDACS PLT. NO. 38
 12. INSTALL 1 1/2" METER & RPPA PER UDACS PLT. NO. 4 & 8 & DETAIL SHEET C5.02 (BRASS BETWEEN METER & RPPA)
 13. INSTALL CROSS PER UDACS PLT. NO. 31 (*)
- * SEE PLANS AND NOTE ATTACHED PIPE SIZE FOR TEE, BEND, GATE VALVE, REDUCER AND CAP SIZES

SEWER CONSTRUCTION NOTES:

- NO. ITEM: UDACS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS.
1. INSTALL 48" SEWER MANHOLE WITH SINGLE LID
 2. INSTALL 60" SEWER MANHOLE WITH SINGLE LID
 3. INSTALL 48" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 4. INSTALL 60" SEWER MANHOLE W/CORROSION PROTECTION WITH SINGLE LID
 5. INSTALL TEMPORARY PLUG AND CAP SEWER STUB
 6. INSTALL ELASTOMERIC JOINT SEALANT AT ALL MANHOLE JOINTS PER UDACS
 7. REMOVE EXISTING PLUG AND CONNECT TO EXISTING SEWER LINE

STORM DRAIN CONSTRUCTION NOTES:

- NO. ITEM: UDACS: PLATE NO. PER UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS.
1. INSTALL TYPE 2 MODIFIED "CM2" DROP INLET PER USDOCA DWG. NO. 412.1 AND 421
 2. NOT USED
 3. INSTALL CAST-IN-PLACE MANHOLE PER DETAIL 7 SHEET C8.02
 4. INSTALL JUNCTION STRUCTURE
 5. INSTALL PRECAST MANHOLE TEE W/ 48" RISER
 6. INSTALL PRECAST MANHOLE TEE W/ 60" RISER
 7. INSTALL PRECAST ELBOW (SEE PLAN FOR 4)
 8. INSTALL TEMPORARY PLUG AND CAP STORM DRAIN LINE
 9. NOT USED
 10. INSTALL WATER TIGHT ELASTOMERIC JOINTS PER UDACS 2.22.02
 11. NOT USED
 12. REMOVE EXISTING PLUG AND CONNECT TO EXISTING STORM DRAIN LINE
- * CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EXISTING STORM DRAIN LINE

SEWER CONNECTION NOTE:

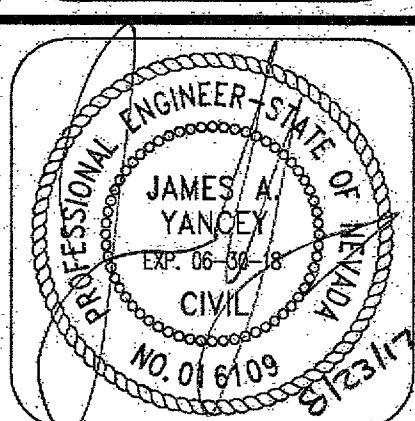
ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND ACCEPTED FOR MAINTENANCE OR UNTIL SUCH TIME AS THEY ARE DEEMED AVAILABLE FOR SERVICE.

WATER MAIN JOINT DEFLECTION (DIP 14"-24")

DIP PIPE SHALL BE DEFLECTED AT JOINT ONLY, FOR PUSH-ON AND MECHANICAL TYPE DIP JOINTS, MAXIMUM DEFLECTION SHALL BE (1.5) DEGREES PER JOINT WITH A MINIMUM RADIUS OF CURVATURE OF 600 FEET FOR 18 FEET OF PIPE LENGTHS AND 765 FEET FOR 20 FEET PIPE LENGTHS, PER UDACS 2.07.03. FOR CHANGES IN DIRECTION EXCEEDING THE MAXIMUM ALLOWABLE JOINT DEFLECTION, FITTINGS SHALL BE USED.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/13/17 PROJECT NO: 124806
LWWD APPROVED FLOW 1500 GPM AT 20 PSI RESIDUAL

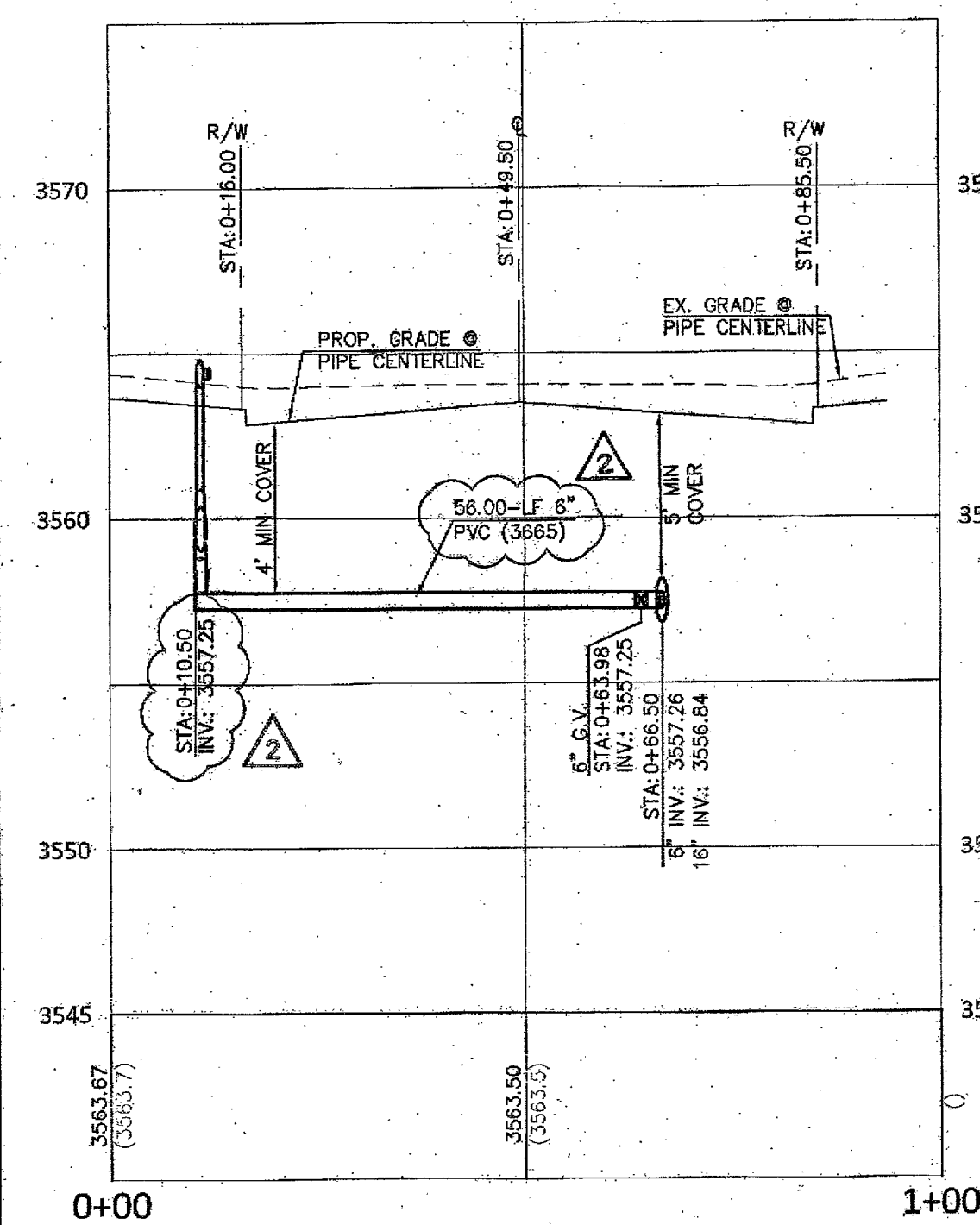
COLLINS ENGINEERS
3130 S. DURANGO DR. SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
WWW.COLLINS-ENG.COM



IMPROVEMENT PLANS FOR
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY PLAN & PROFILE
STA. 28+00.00 TO 30+63.00
CITY OF LAS VEGAS
SUMMERLIN VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 3

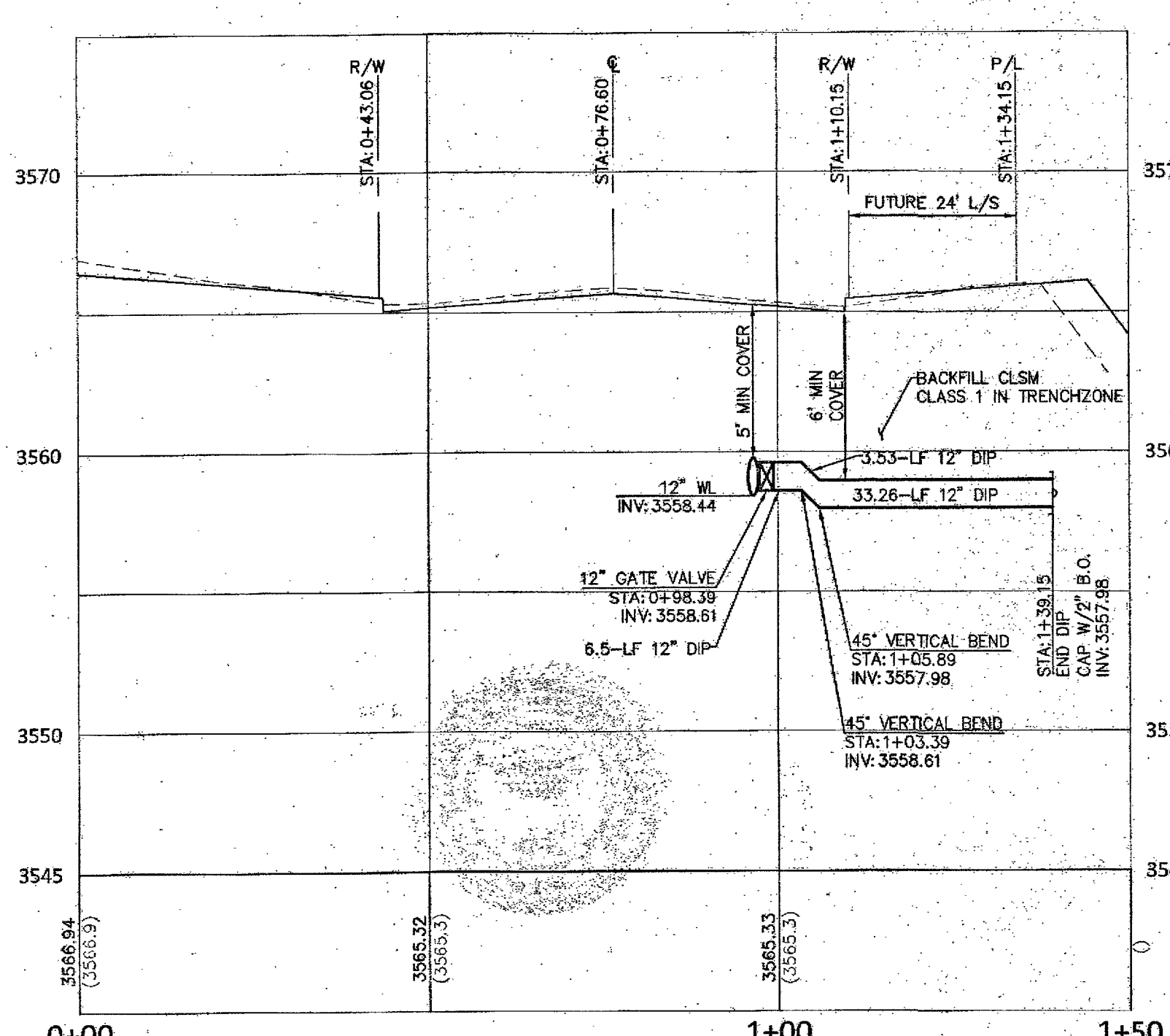
NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SALDIVAR	REVISION: SEE 5th LOCATION: APPROVED BY: J. SALDIVAR
2	10/12/18	J. SALDIVAR	REVISION: SEE 5th LOCATION: APPROVED BY: J. SALDIVAR
3	10/12/18	J. SALDIVAR	REVISION: SEE 5th LOCATION: APPROVED BY: J. SALDIVAR

CEI PROJECT: 9106
DESIGN BY: J. SALDIVAR
DRAWN BY: J. SALDIVAR
CHECKED BY: K. YAMADA
DATE: 04/20/17
SCALE: 1" = 20'
SHEET NUMBER
C5.08
10747063
SHEET 13 OF 26
H05276



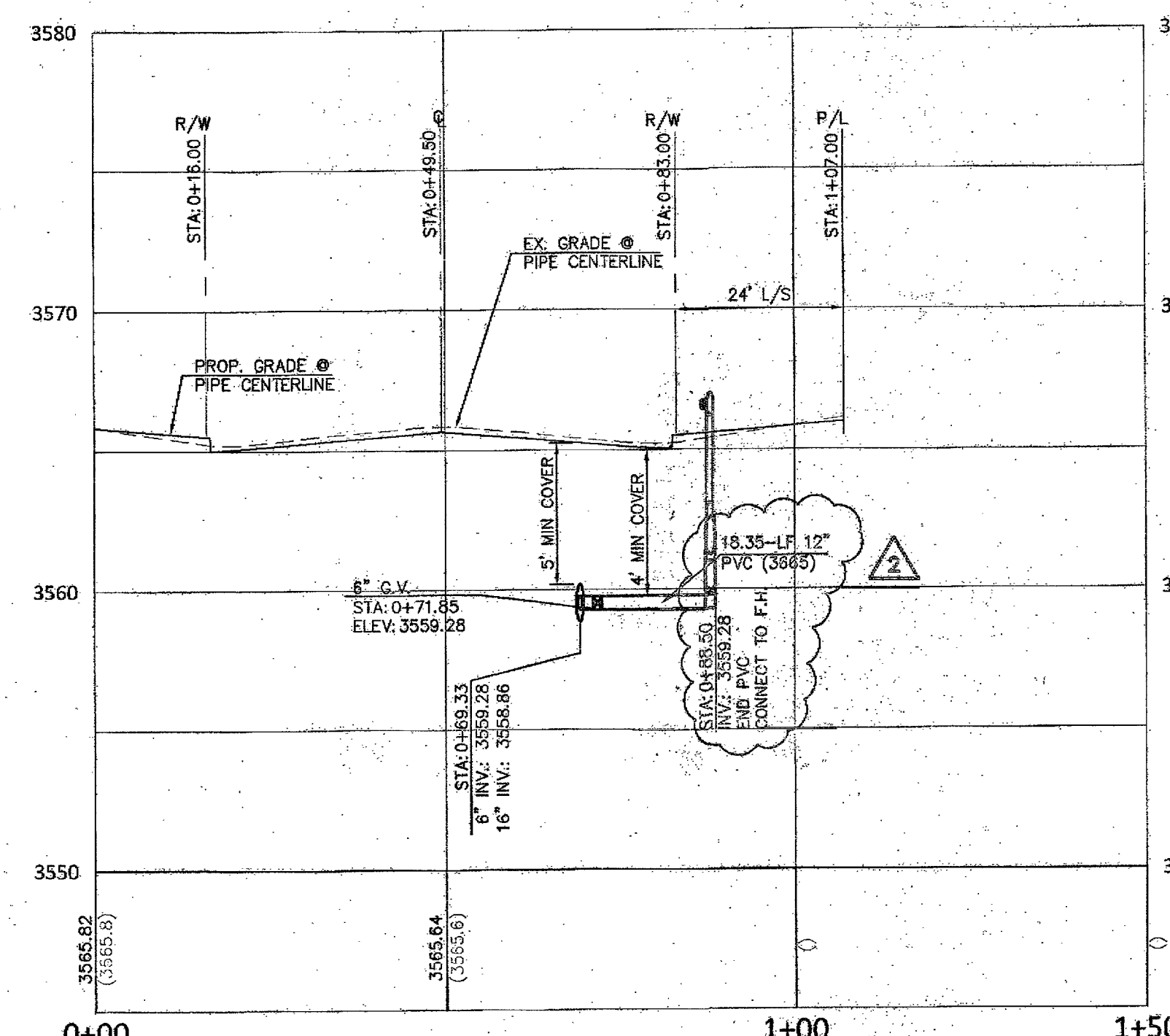
1 F.H. LATERAL - STA: 7+30.00
C5.09 (REF. SHEET C5.03)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



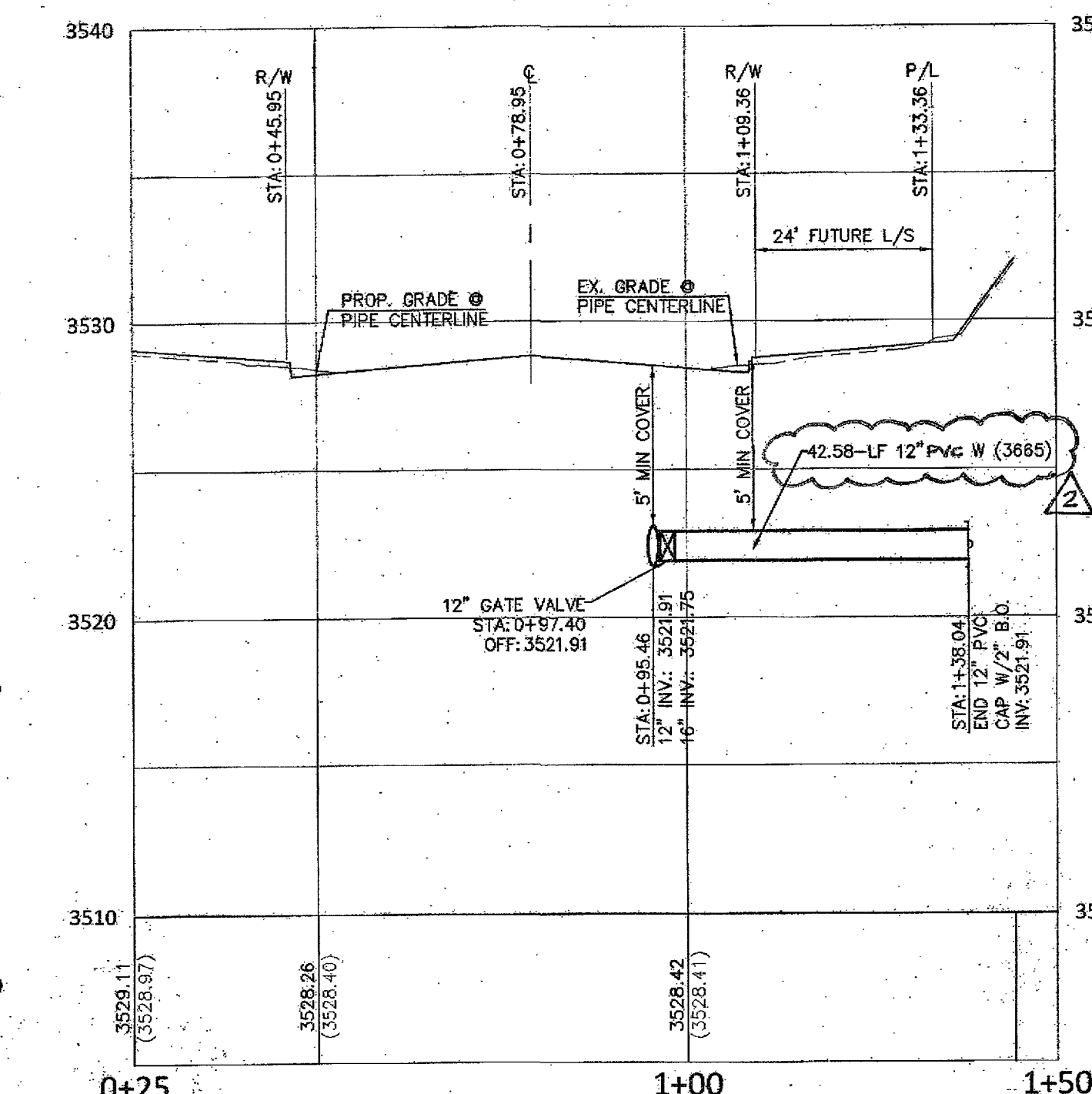
2 12" WATER LATERAL - STA: 12+30.00
C5.09 (REF. SHEET C5.04)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



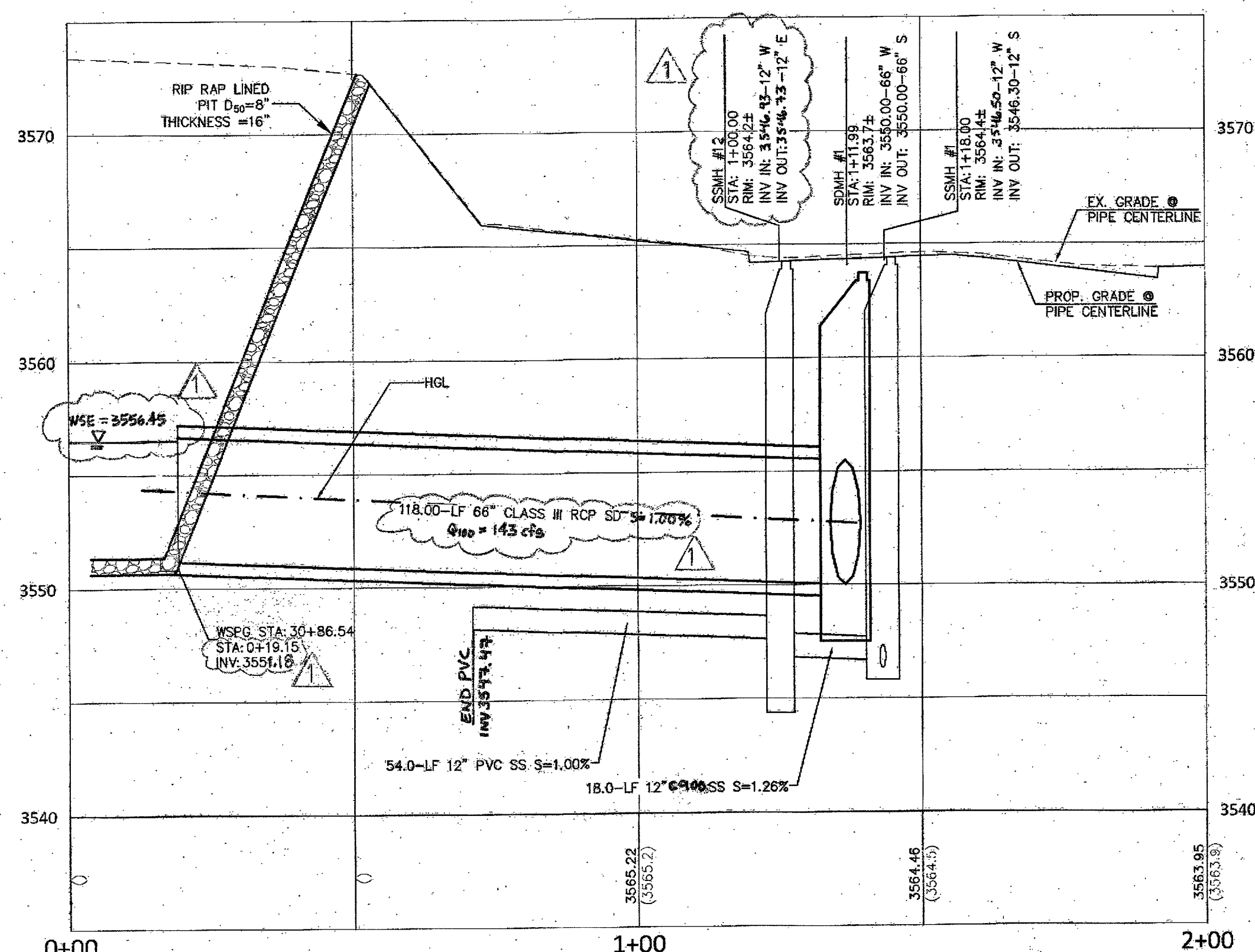
3 F.H. LATERAL - STA: 12+06.31
C5.09 (REF. SHEET C5.04)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



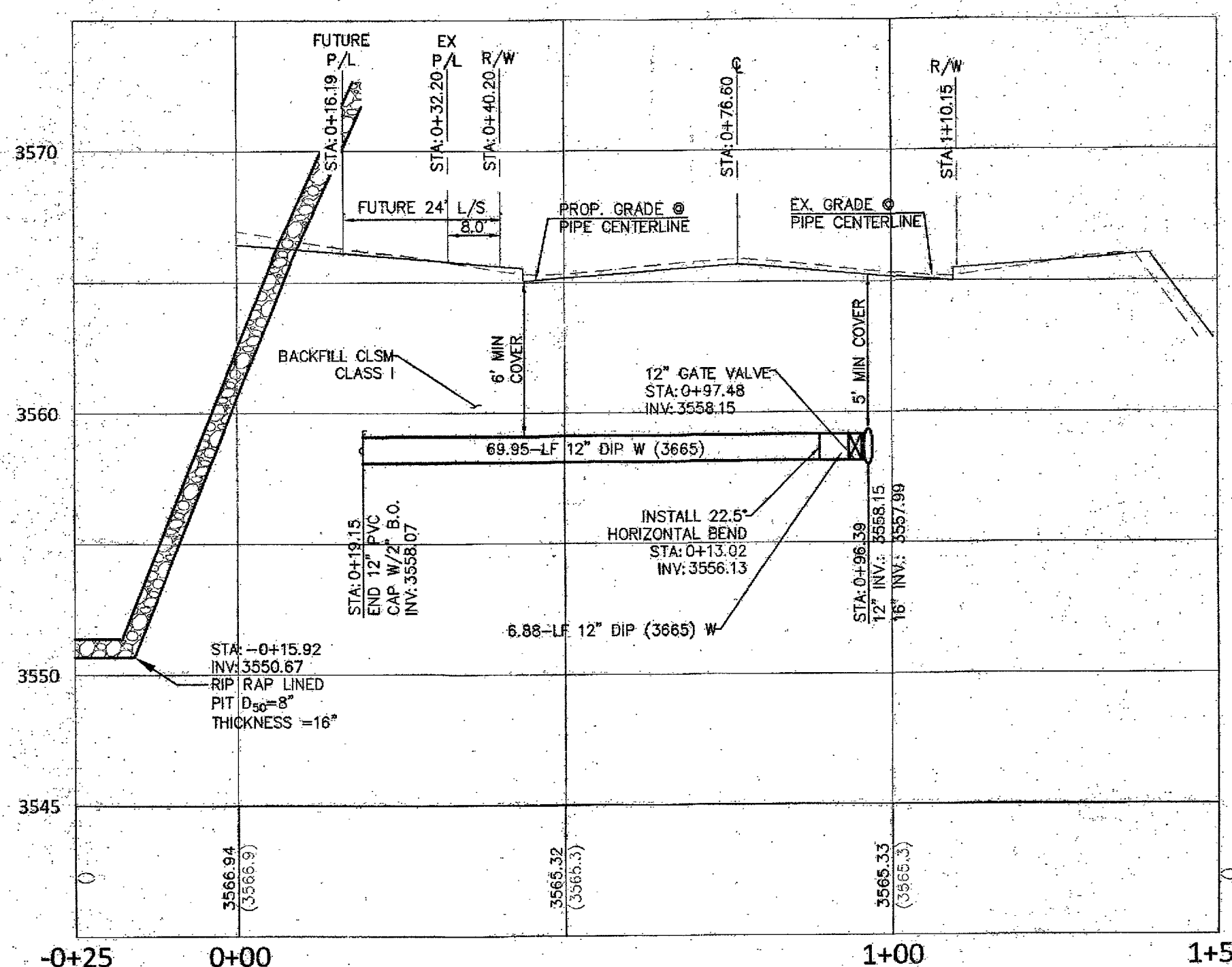
7 12" WATER LATERAL - STA: 18+96.38
C5.09 (REF. SHEET C5.05)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



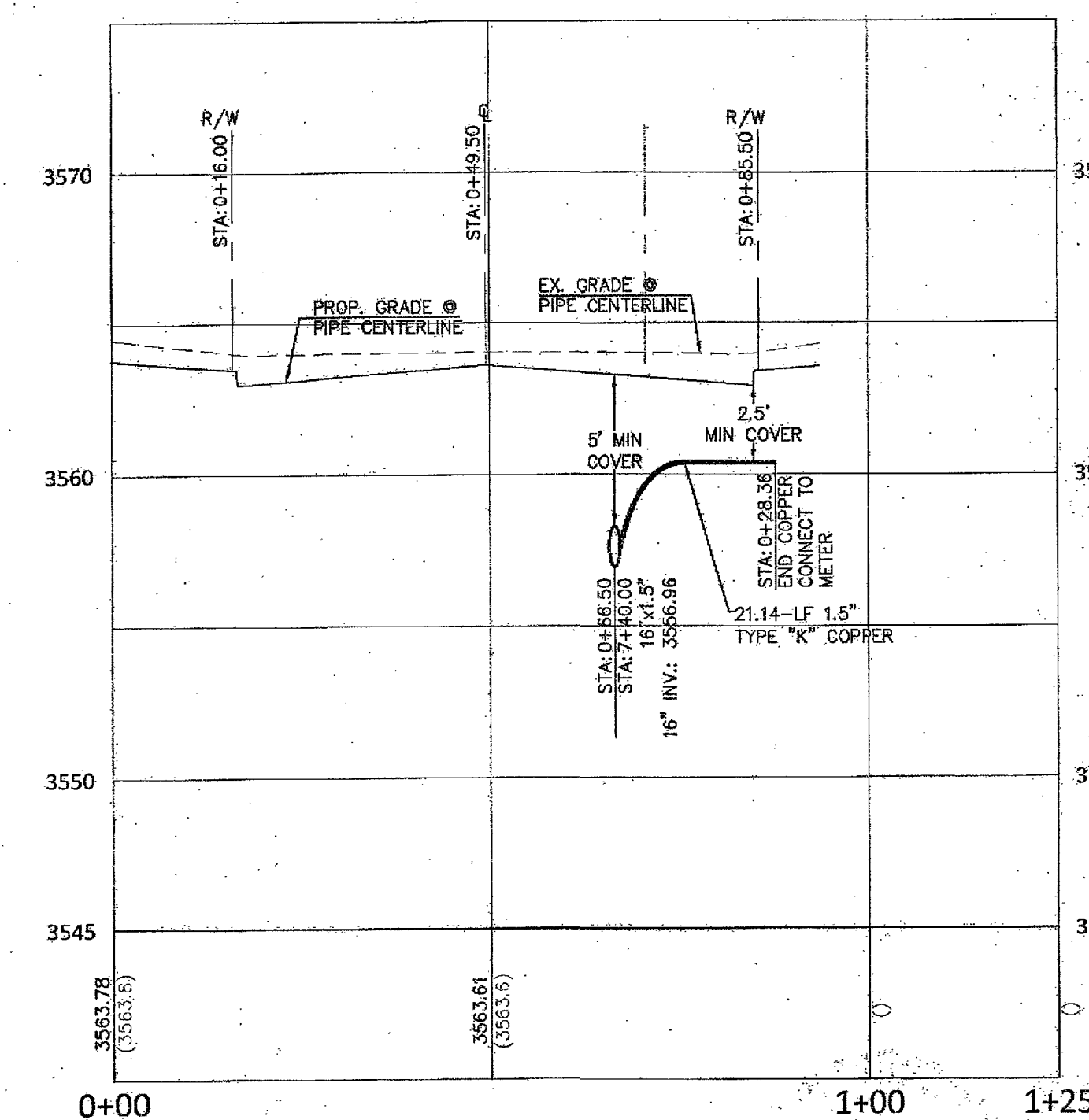
4 SSMH #1 - STA: 12+75.00
C5.09 (REF. SHEET C5.04)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



5 12" WATER LATERAL - STA: 12+58.00
C5.09 (REF. SHEET C5.04)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



6 TYPE "K" COPPER - STA: 7+40.00
C5.09 (REF. SHEET C5.03)

PROFILE VIEW
H: 1"=20'
V: 1"=5'

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/31/17 PROJECT NO: 124808
LVWD APPROVED FIRE FLOW: 1,500 GPM AT 20 PSI RESIDUAL

DROP INLET NOTE
WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

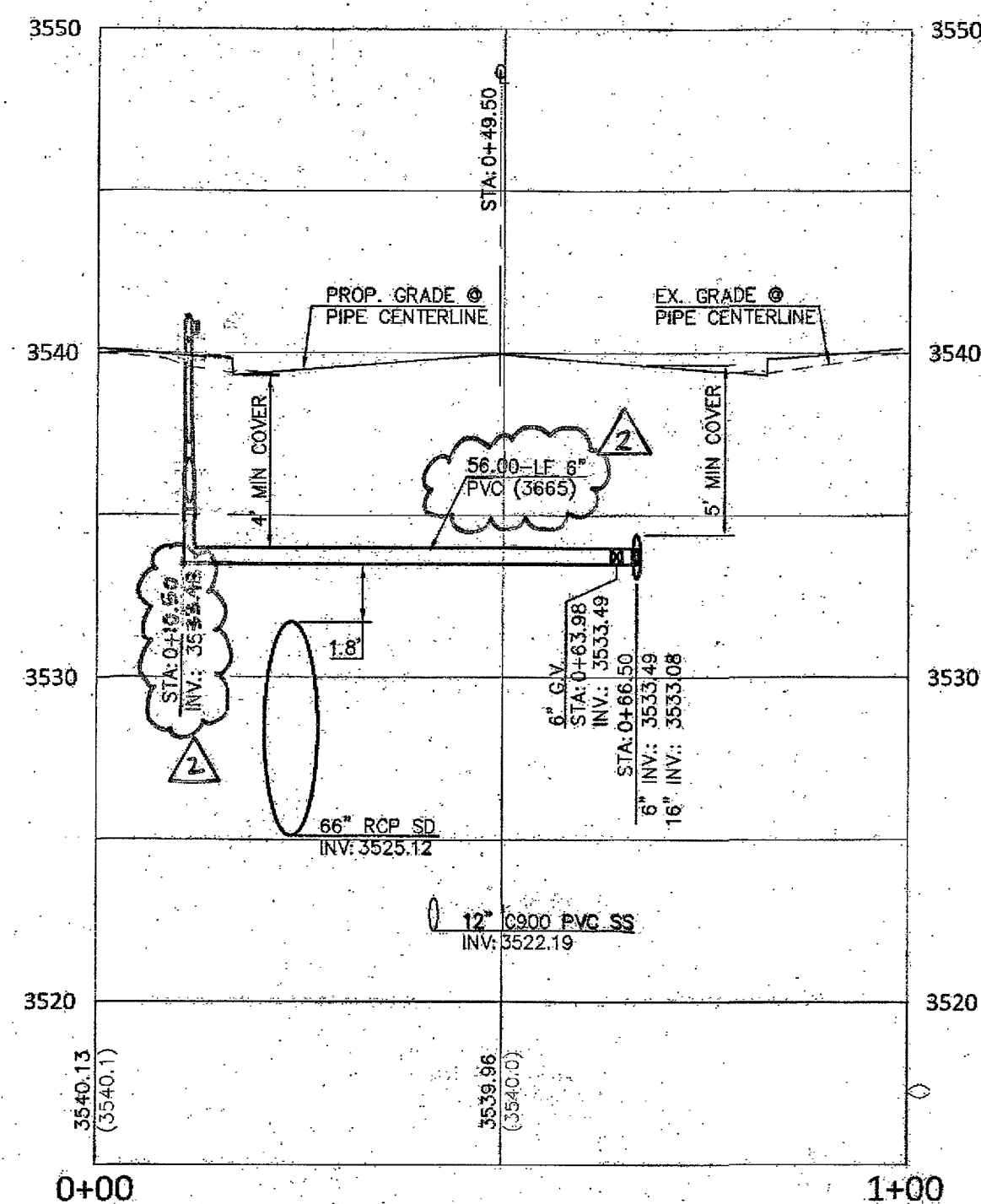
COLLINS ENGINEERS
3130 S DURANGO DR., SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
www.collinsengr.com

PROFESSIONAL ENGINEER - STATE OF NEVADA
JAMES A. YANCEY
EXP. 06-30-18
NO. 016709

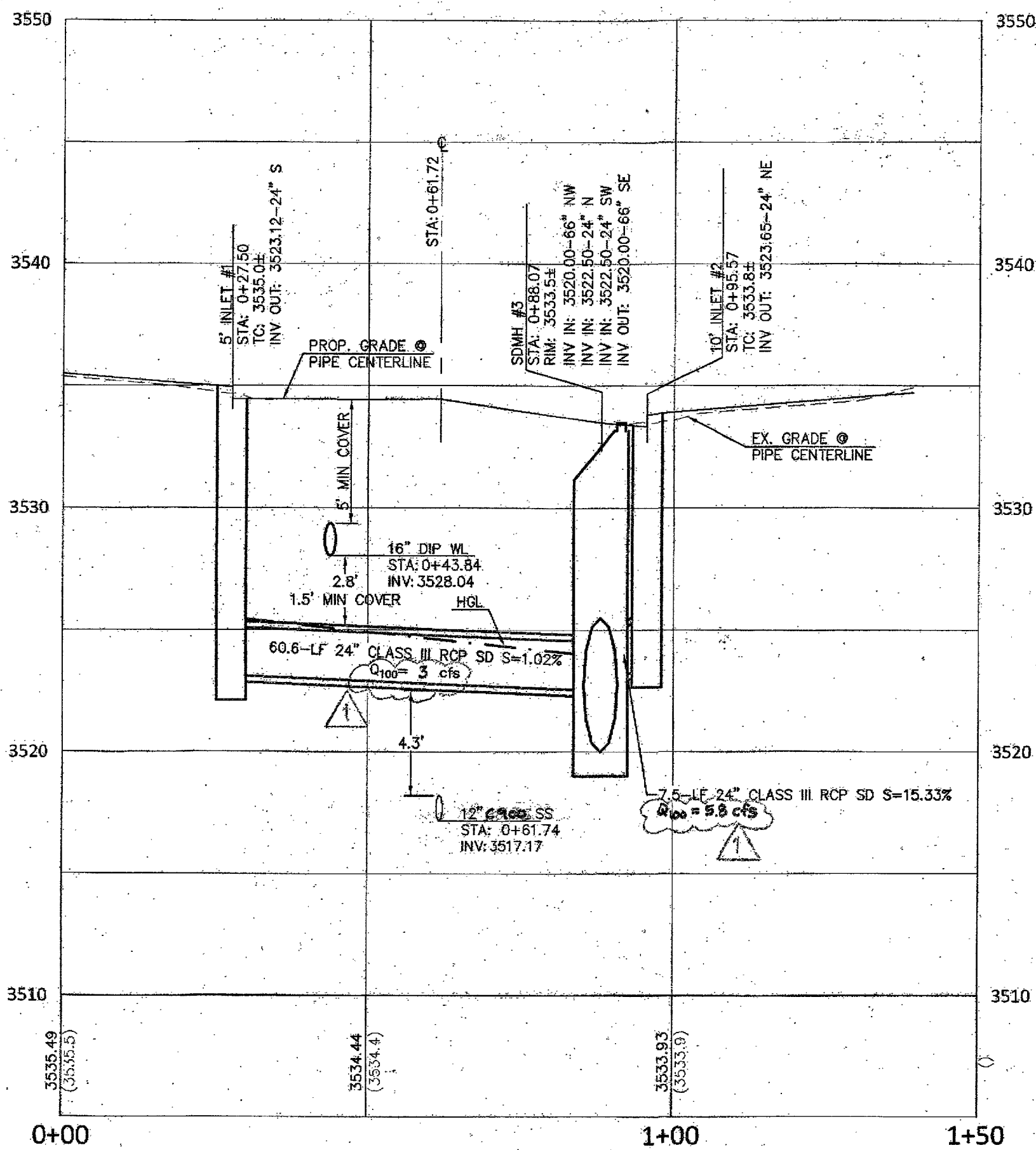
IMPROVEMENT PLANS FOR THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY LATERALS 1
SUMMERLIN VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SALDIVAR	REVISED SS & SD SFD APP EX. 4/12/18
2	10/12/18	APP BY Lm shaw	REVISED BY LOCATION LWS 4/12/18

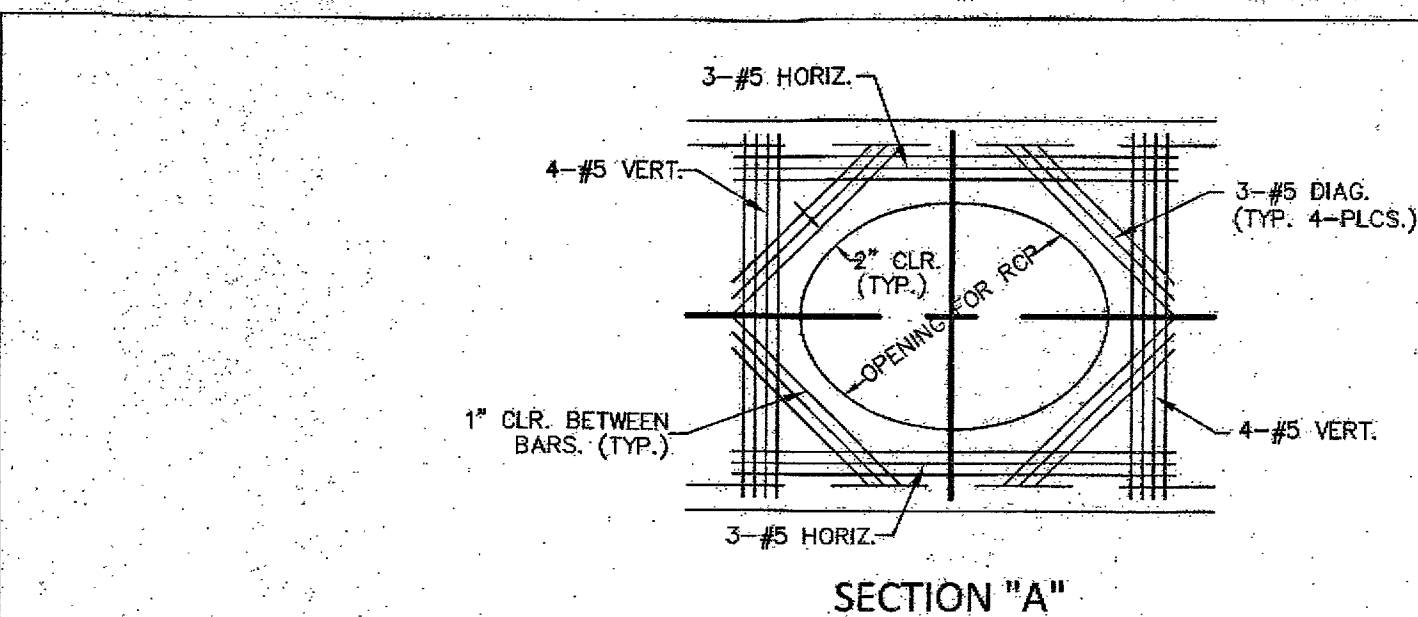
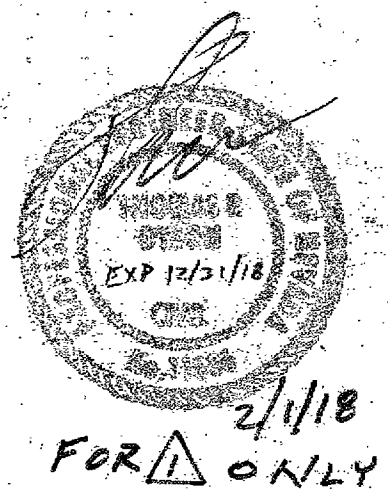
CEI PROJECT:	9106
DESIGN BY:	J. SALDIVAR
DRAWN BY:	J. SALDIVAR
CHECKED BY:	K. YAMADA
DATE:	04/20/17
SCALE:	
SHEET NUMBER	C5.09
	107V7053
	SHEET 14 OF 26



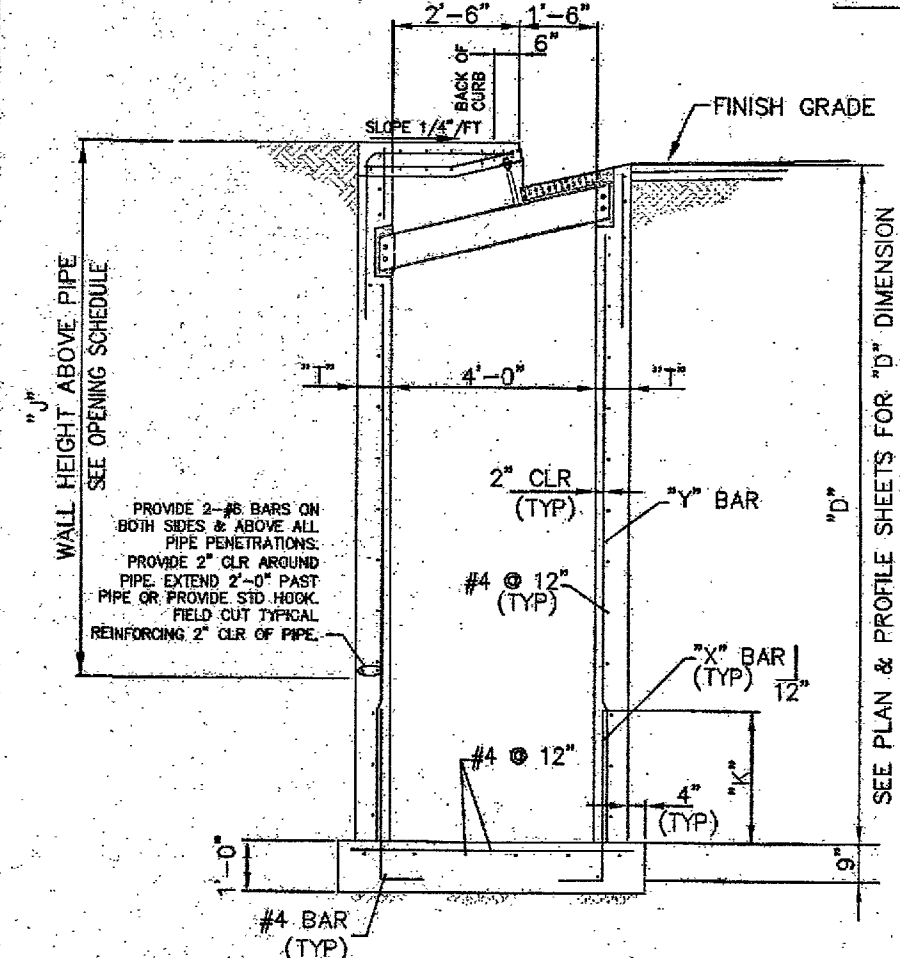
1 F.H. LATERAL - STA: 17+30.00
C5.10 (REF. SHEET C5.05)
H: 1"=20'
V: 1"=5'



2 SDMH #3 - STA: 18+15.20
C5.10 (REF. SHEET C5.05)
H: 1"=20'
V: 1"=5'



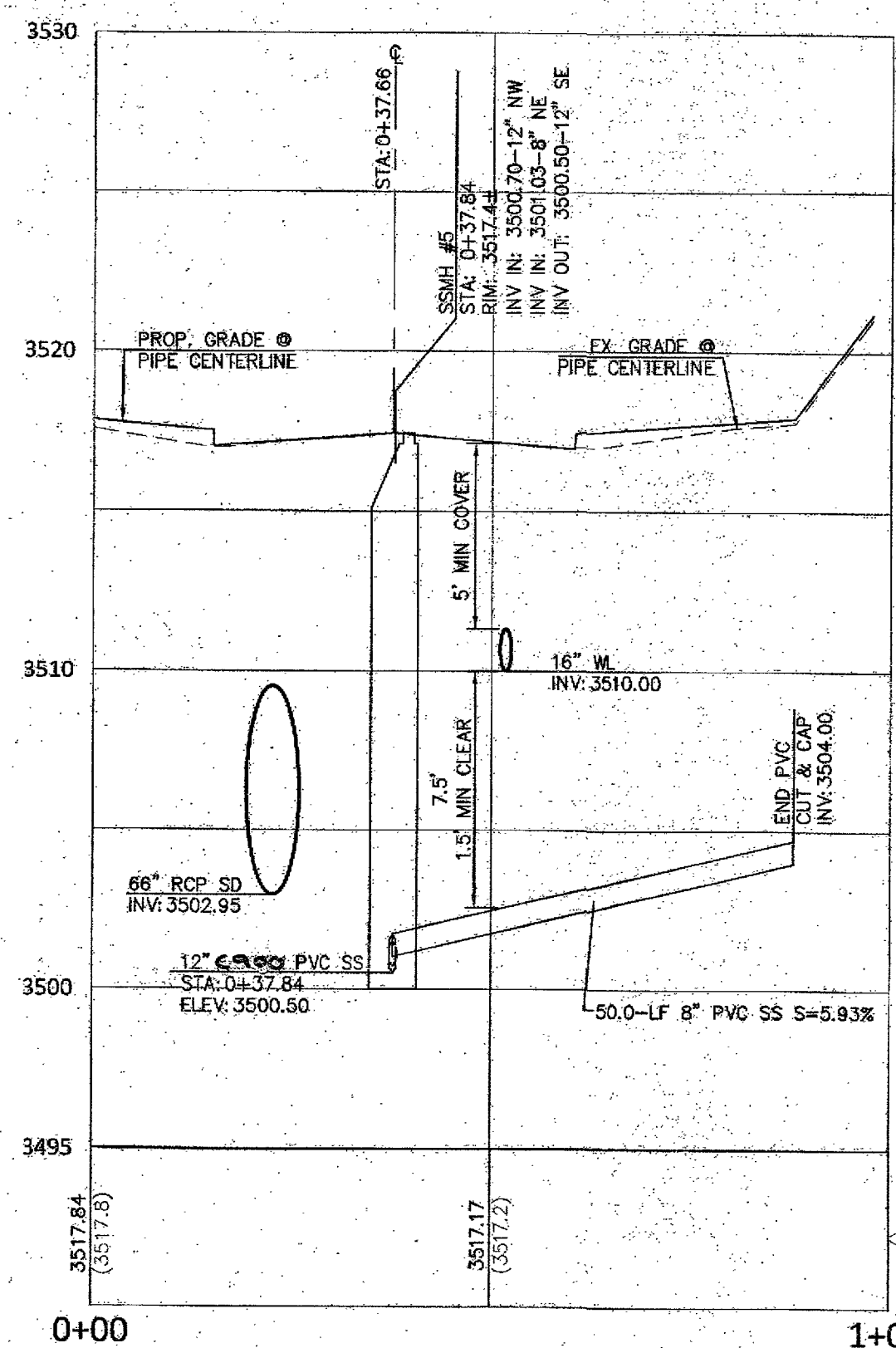
SECTION "A"



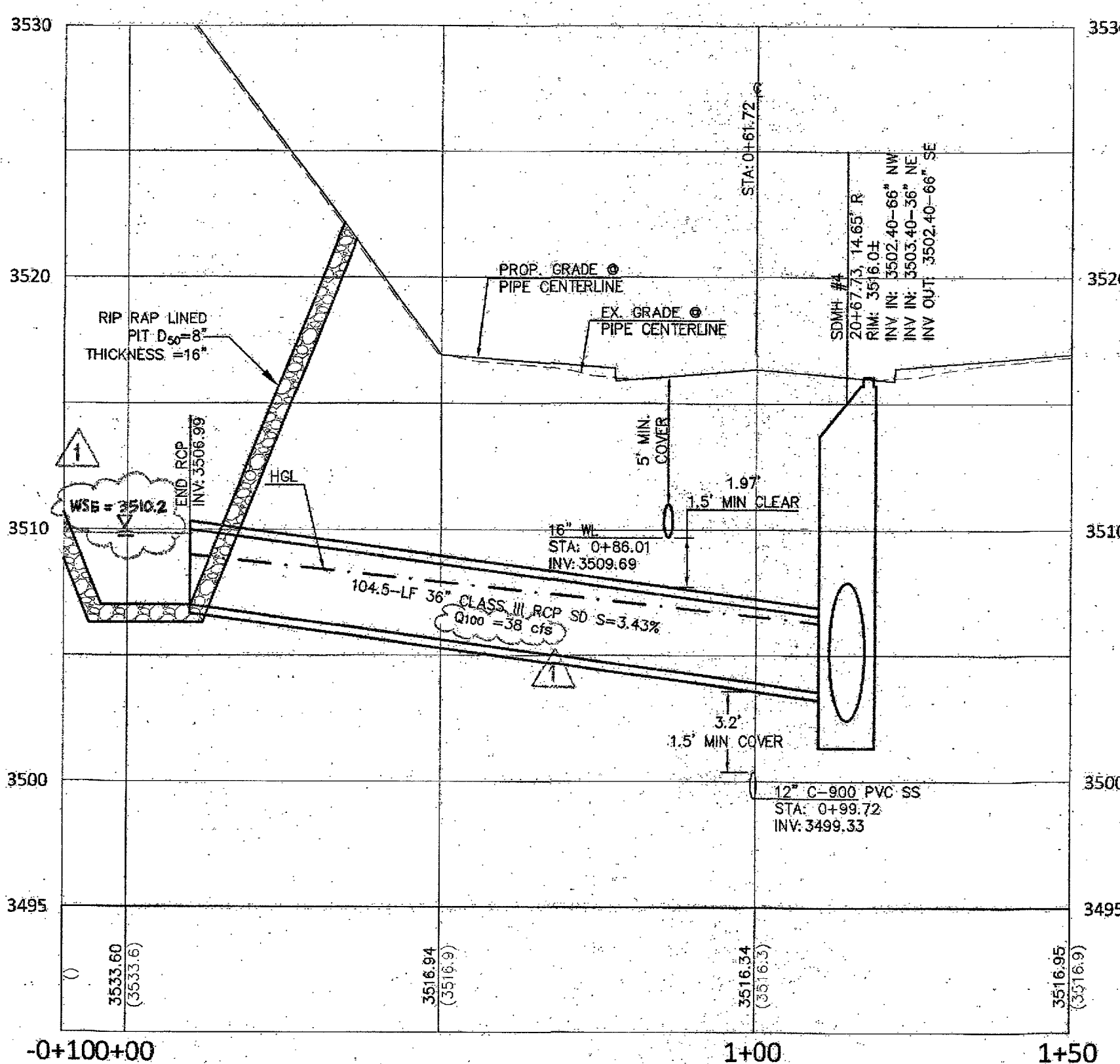
DIMENSIONS	"D"	"K"	"X" BARS	"Y" BARS
D ≤ 7'-0"	8"	2'-0"	#4 @ 12"	#4 @ 12"
7'-0" < D ≤ 9'-0"	8"	2'-6"	#5 @ 12"	#5 @ 12"
9'-0" < D ≤ 10'-6"	8"	2'-6"	#5 @ 6"	#5 @ 6"
10'-6" < D ≤ 13'-3"	10"	2'-6"	#5 @ 4"	#5 @ 4"
13'-3" < D ≤ 14'-6"	12"	3'-0"	#6 @ 4"	#6 @ 4"

TYPICAL CATCH BASIN SECTION
NOT TO SCALE

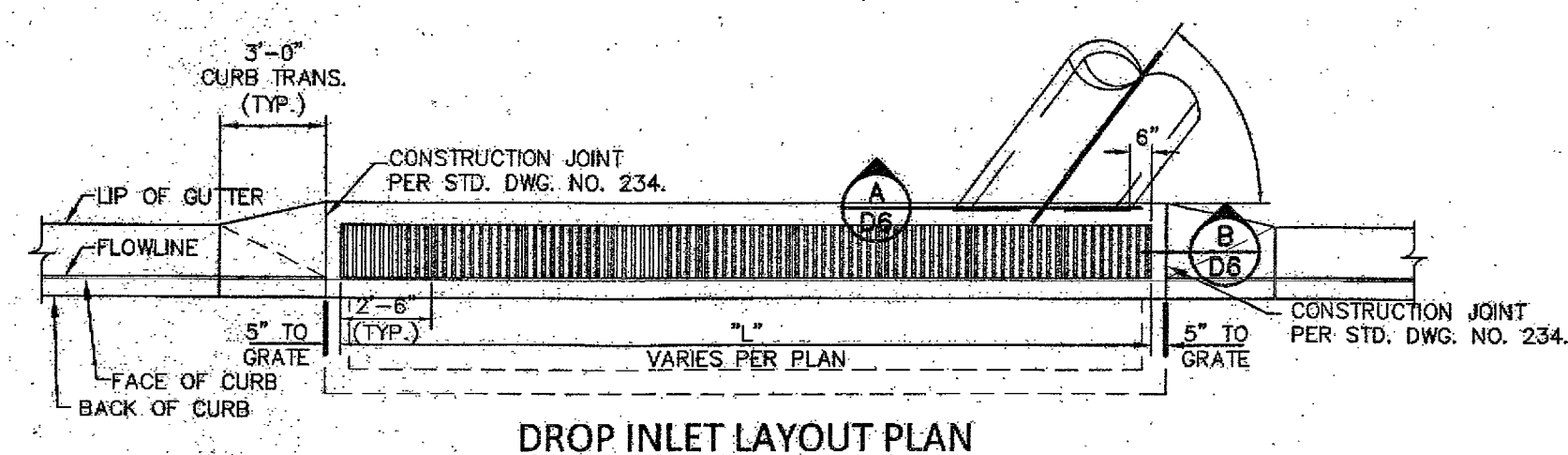
6 DROP INLET DETAIL
C5.10 NTS



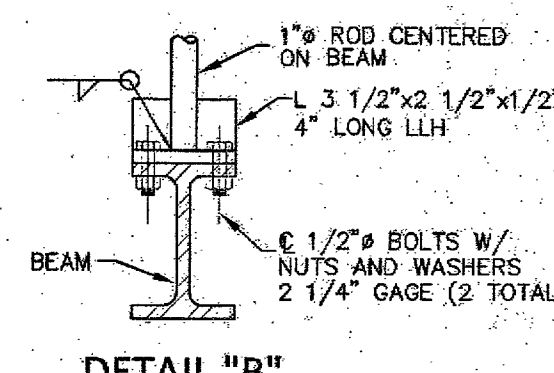
3 SSMH #5 - STA: 20+52.00
C5.10 (REF. SHEET C5.06)
H: 1"=20'
V: 1"=5'



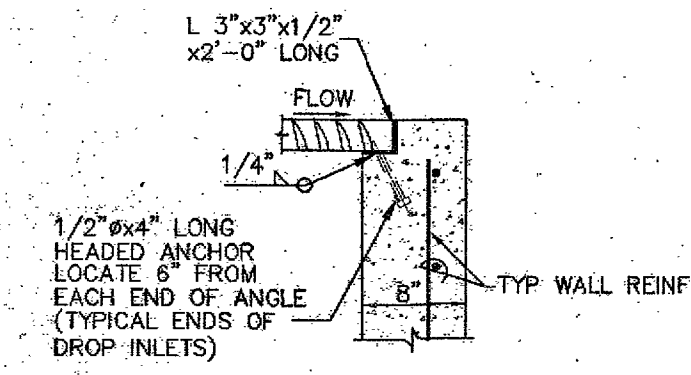
4 SDMH #4 - STA: 20+67.73
C5.10 (REF. SHEET C5.06)
H: 1"=20'
V: 1"=5'



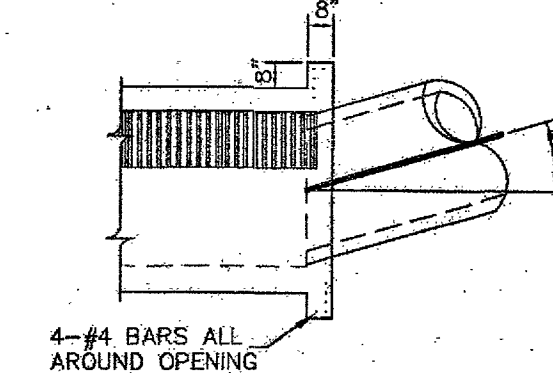
DROP INLET LAYOUT PLAN



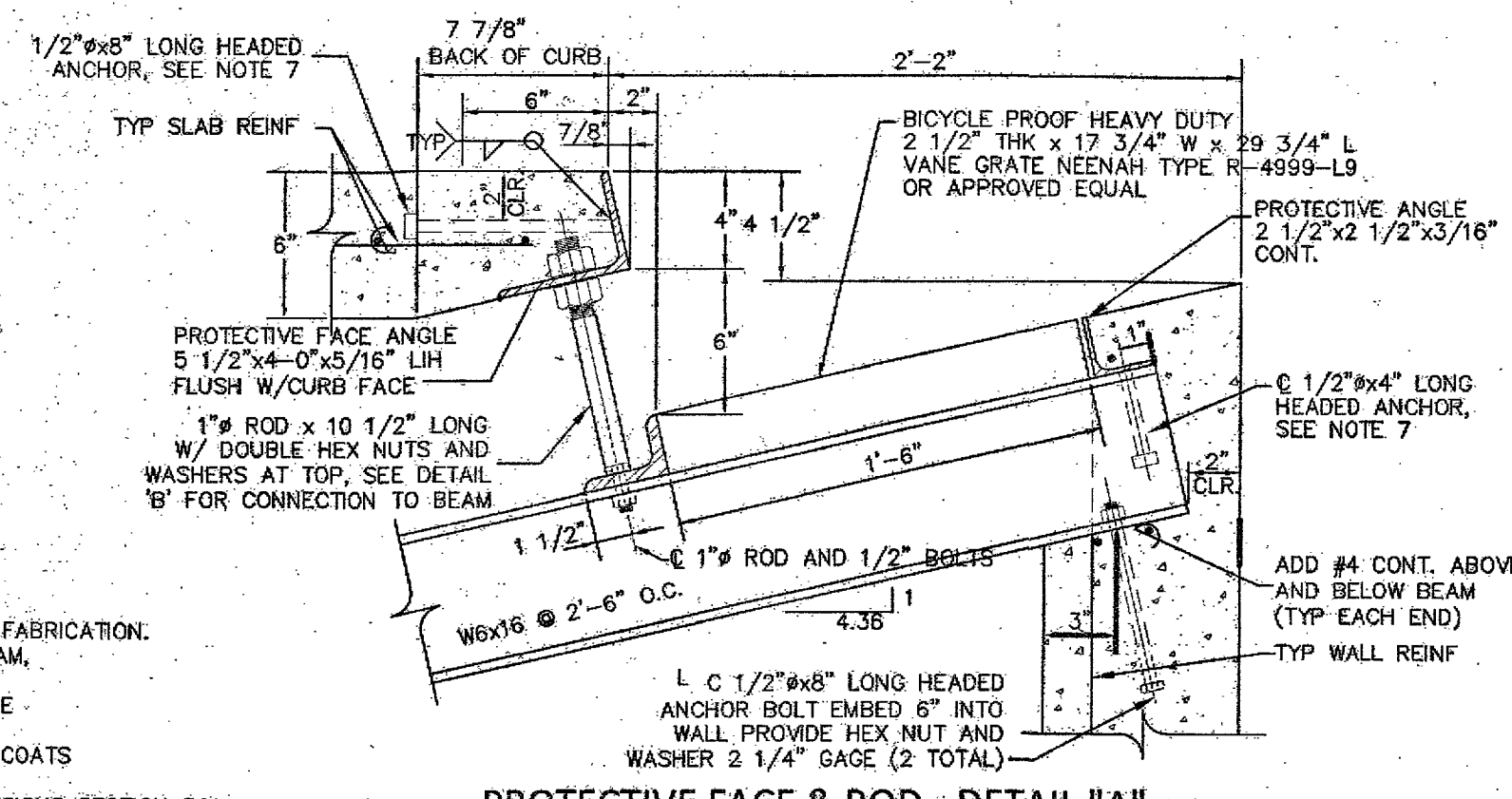
DETAIL "B"



SECTION "B"



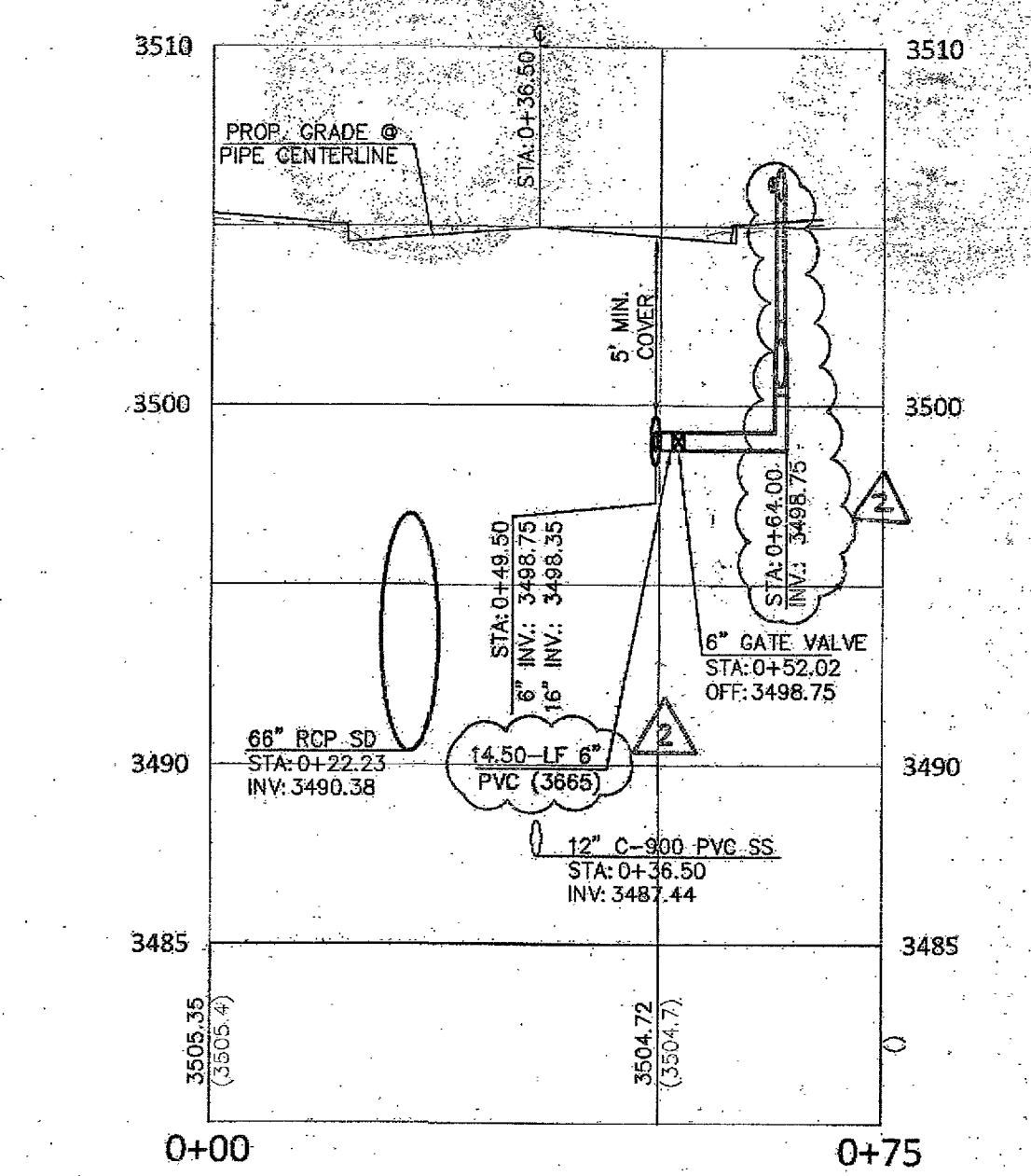
ALTERNATE CONNECTION DETAIL



PROTECTIVE FACE & ROD - DETAIL "A"

NOTES:

1. ALL EXPOSED METALS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. PROVIDE 1/2" (MIN.) CLEARANCE ALL AROUND THE STEEL BEAM.
3. WHEN REQUIRED BY LENGTH OF OPENING, PLATE ANGLE MAY BE DELIVERED IN SECTIONS AND BUTT WELDED IN PLACE.
4. ALL GALVANIZING DAMAGED BY WELDING SHALL RECEIVE TWO COATS OF GALVALLOY OR EQUAL.
5. CONCRETE SHALL BE MODIFIED CLASS DA, SEE SPECIAL PROVISIONS SECTION 501.
6. SEE GENERAL NOTES FOR STRUCTURES ON DWG D8.
7. ANGLE ANCHORS SHALL BE EMBEDDED MIDPOINT IN EACH ENDWALL AND EVENLY SPACED. (MAXIMUM SPACING OF 2')

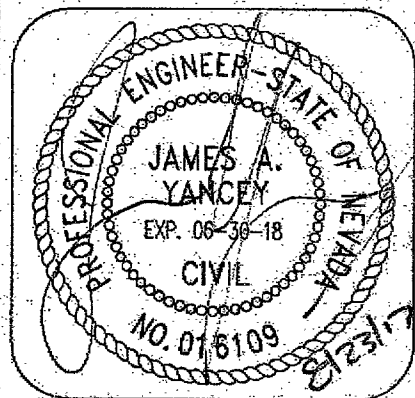


5 F.H. LATERAL - STA: 22+30.00
C5.10 (REF. SHEET C5.04)
H: 1"=20'
V: 1"=5'

DROP INLET NOTE
WHERE 10 FEET PARALLEL SEPARATION IS NOT PRACTICABLE
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BULB, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/31/17 PROJECT NO: 124806
LVWD APPROVED FIRE FLOW 1,500 GPM AT 20 PSI RESIDUAL

COLLINS ENGINEERS
3130 S. DURANGO DR., SUITE 404
LAS VEGAS, NV 89137
PHONE: (702) 248-8000
FAX: (702) 248-8070
www.collinsengr.com

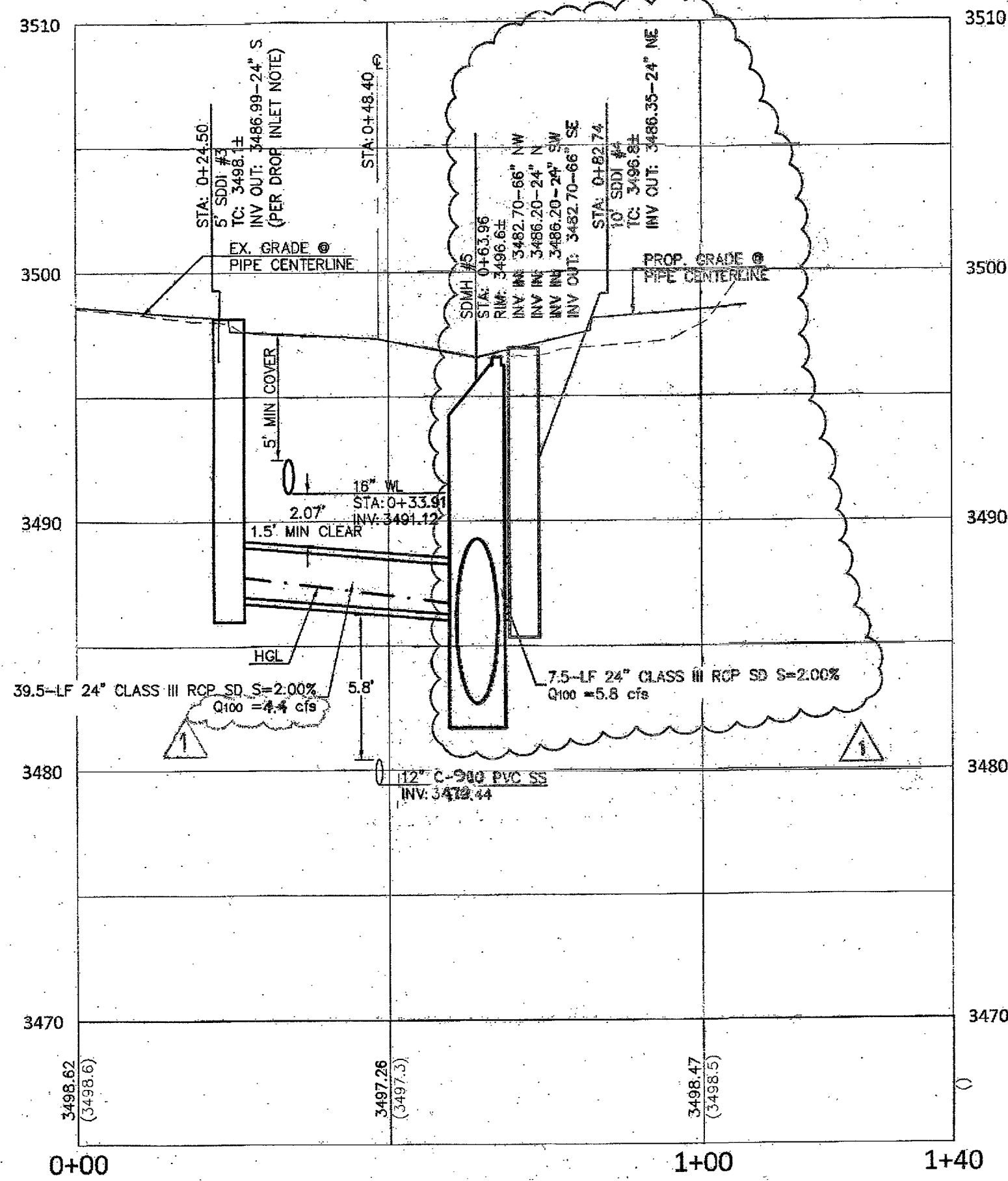


IMPROVEMENT PLANS FOR
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY LATERALS 2
SUMMERLIN VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SALDIVAR	REVISED SD INFO APP'D BY: J. SALDIVAR
2	08/02/18	J. SALDIVAR	REVISED PH LOCATION APP'D BY: J. SALDIVAR

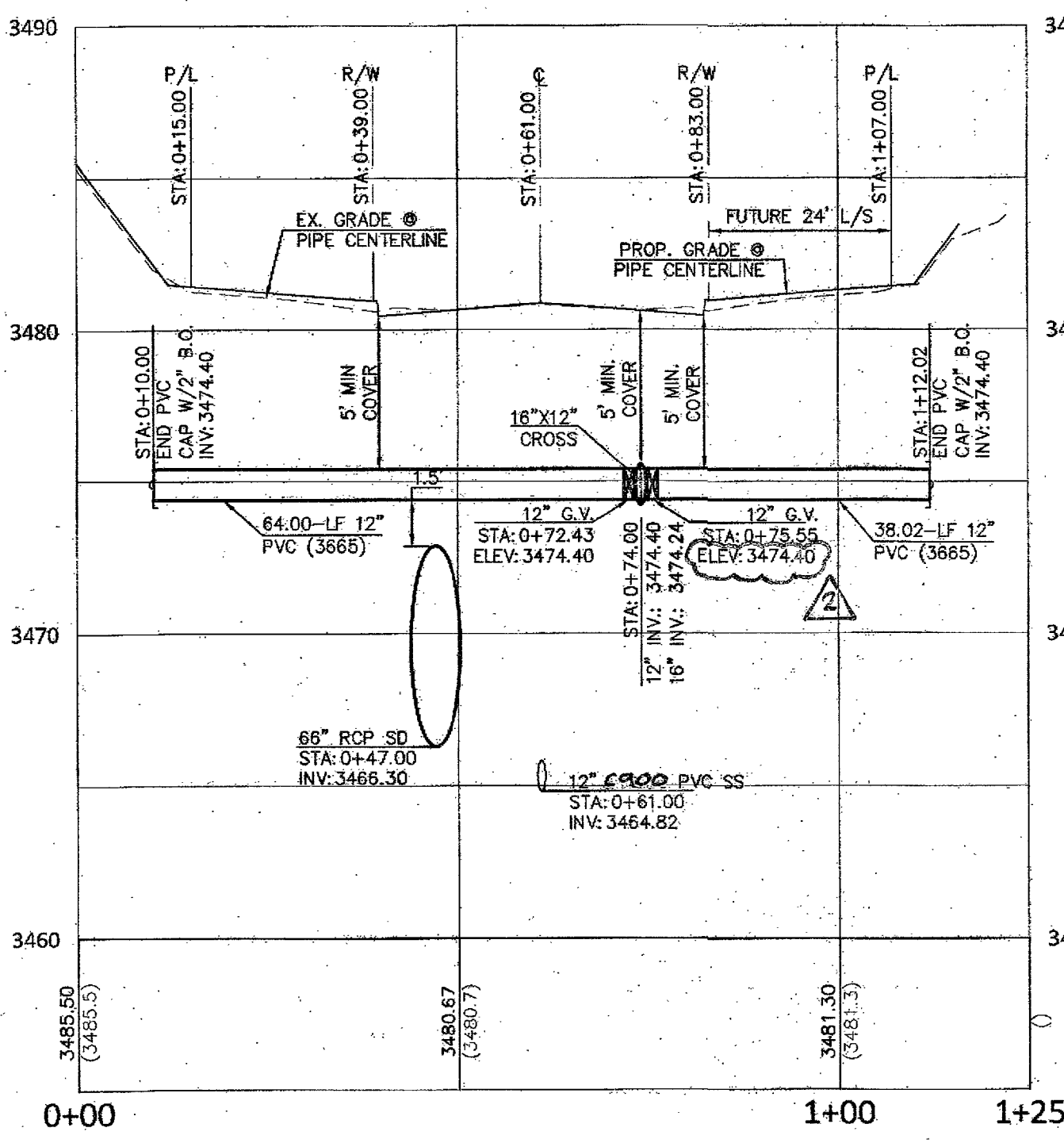
CEI PROJECT: 9106
DESIGN BY: J. SALDIVAR
DRAWN BY: J. SALDIVAR
CHECKED BY: K. YAMADA
DATE: 04/2017
SCALE:

SHEET NUMBER
C5.10
10717043
SHEET 15 OF 26
H05276



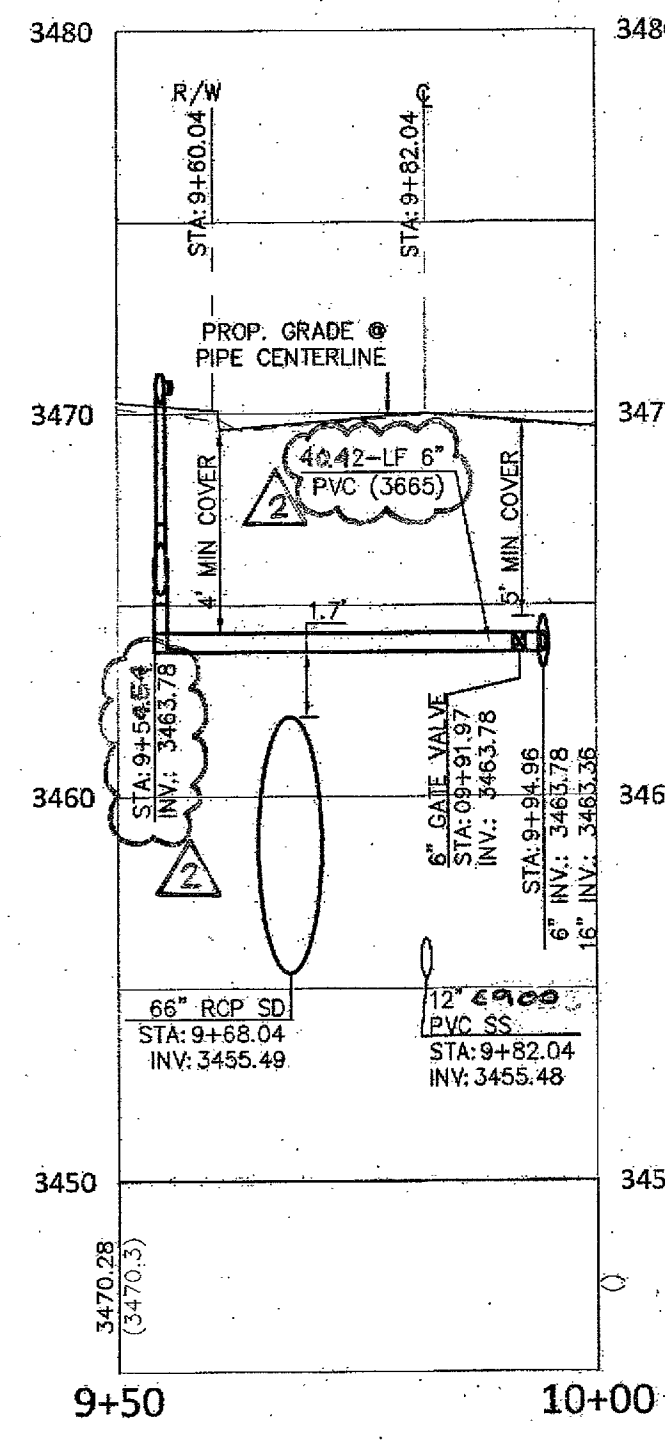
1
C5.11 SDMH #5 - STA: 23+46.20
(REF. SHEET C5.06)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



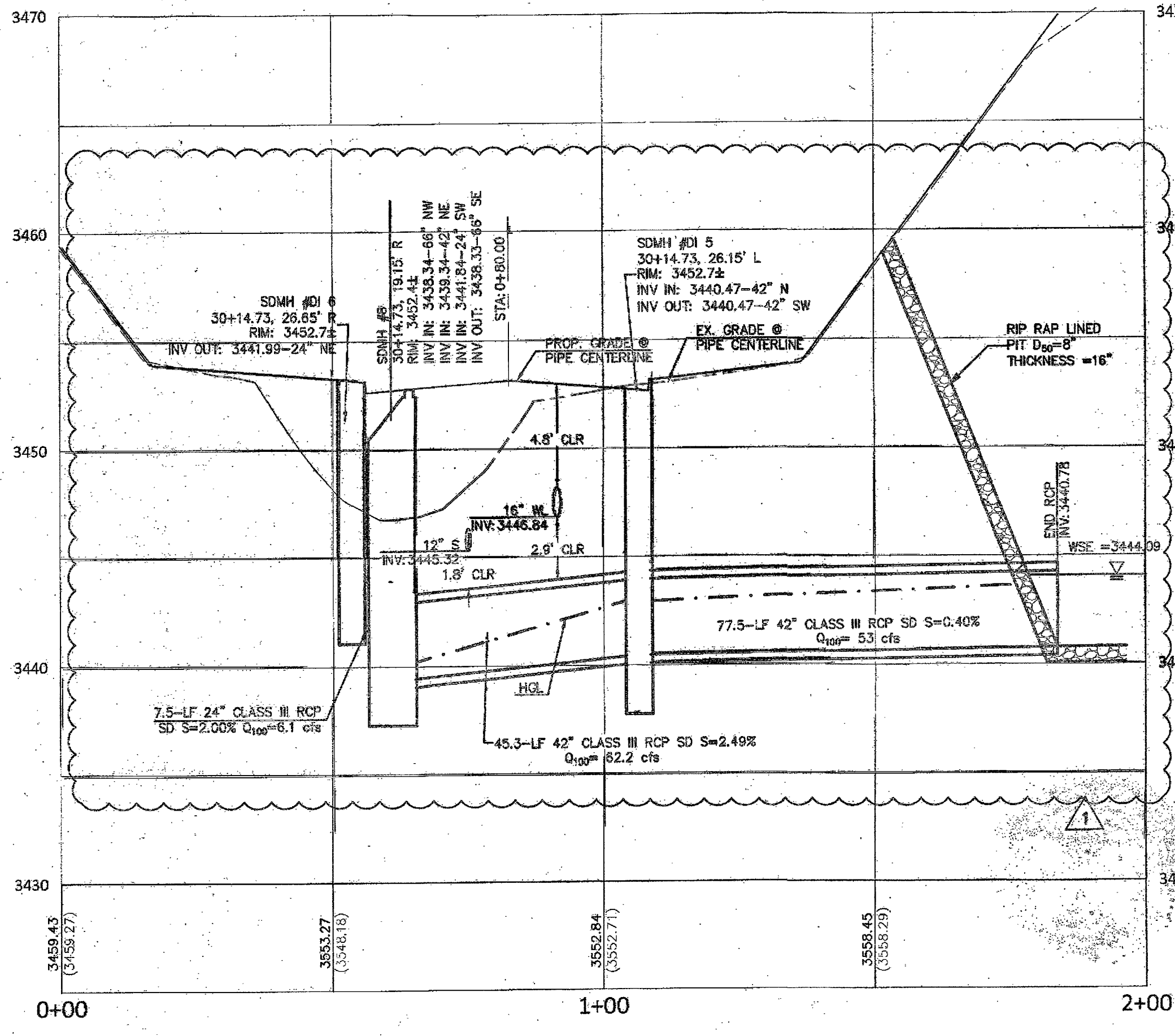
2
C5.11 12" WATER LATERAL - STA: 25+62.50
(REF. SHEET C5.07)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



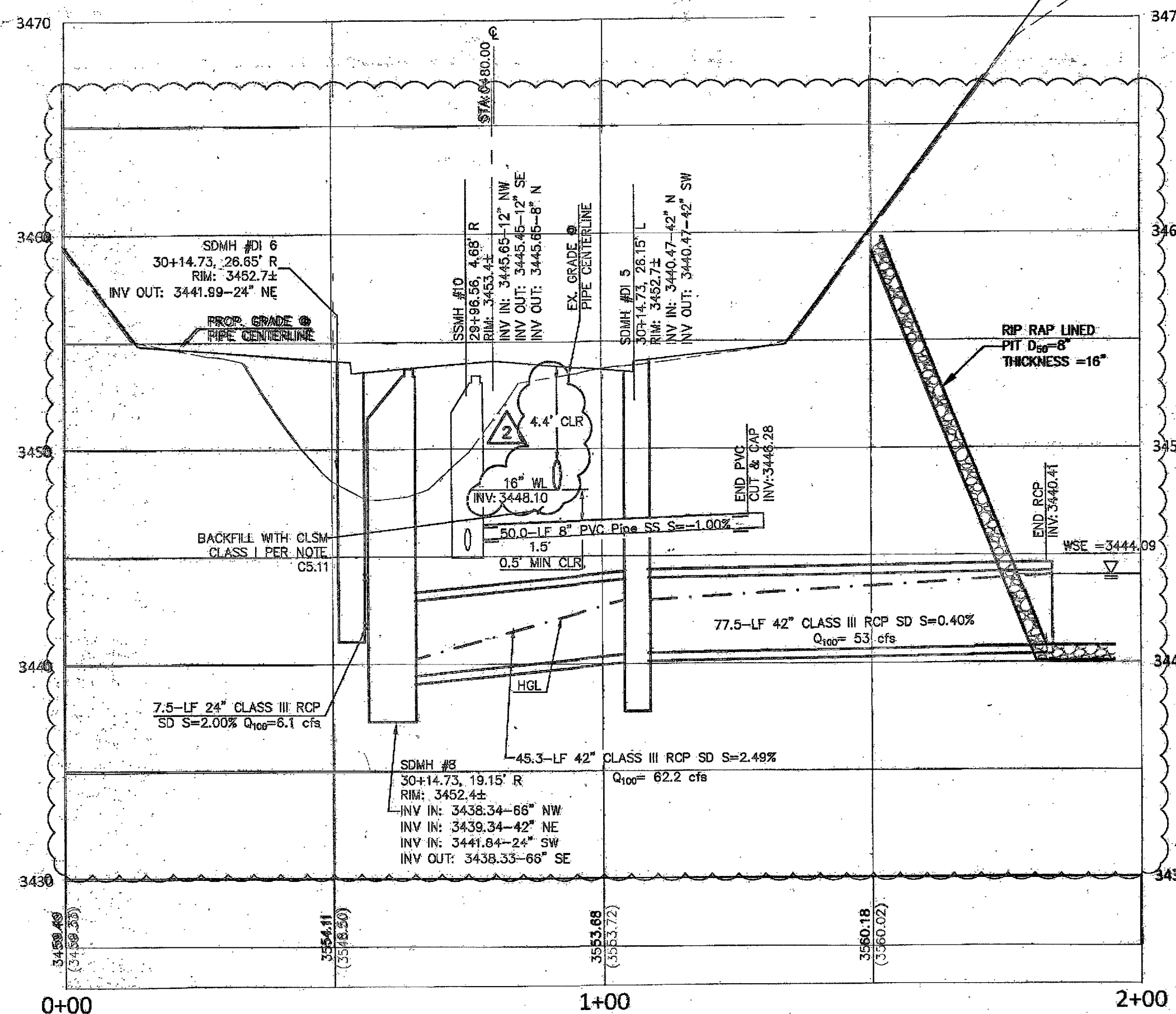
3
C5.11 F.H. LATERAL - STA: 27+30.00
(REF. SHEET C5.07)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



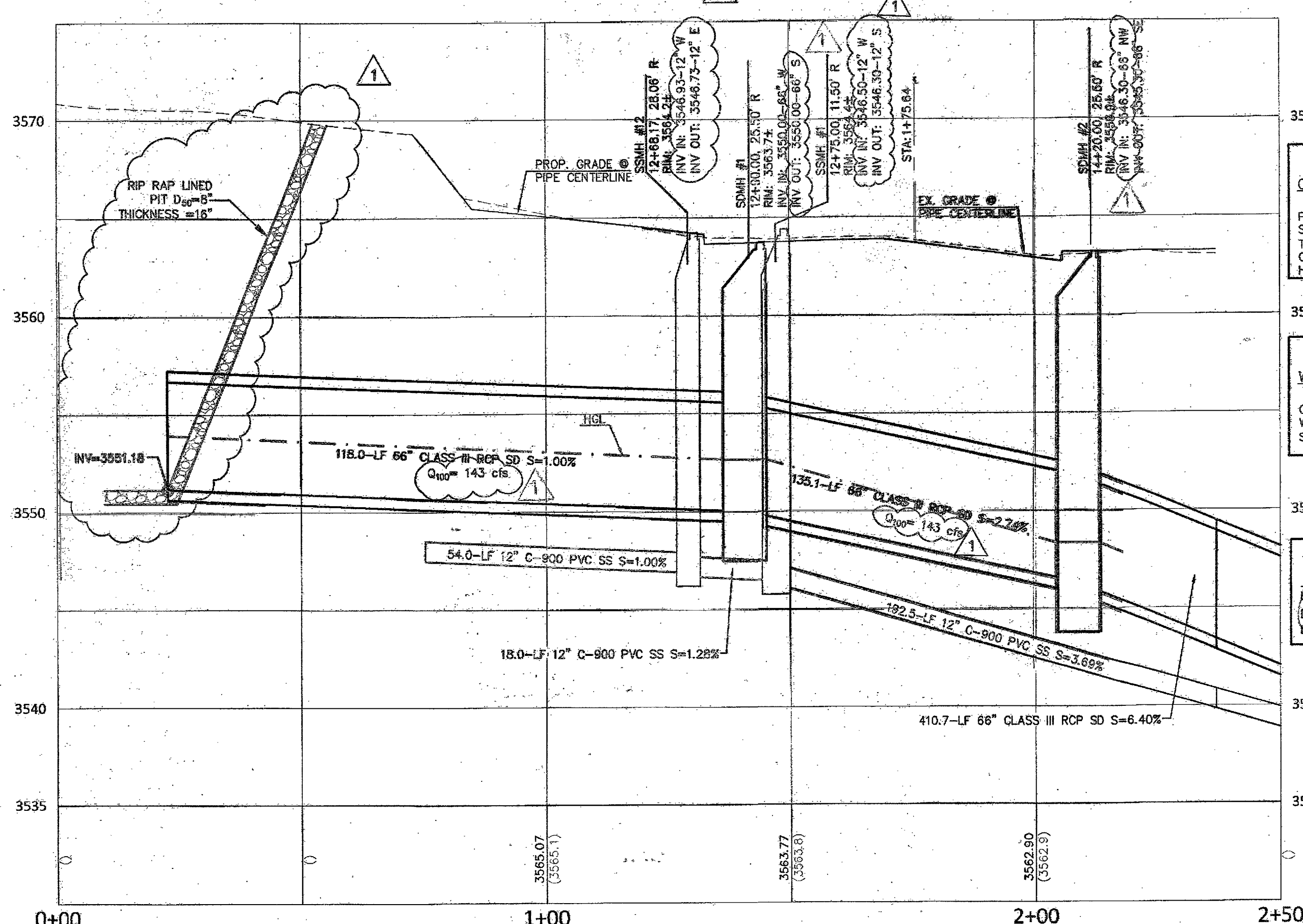
5A
C5.11 SDMH #8 - STA: 30+14.73
WITHOUT SS (REF. SHEET C5.08)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



5B
C5.11 SSMH #10 - STA: 29+96.56
(REF. SHEET C5.08)

PROFILE VIEW
H: 1"=20'
V: 1"=5'



6
C5.11 SDMH 1 - STA: 12+49.17
(REF. SHEET C5.04)

PROFILE VIEW
H: 1"=20'
V: 1"=5'

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PROTECT WATERLINES IN PLACE. WHEREVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER, COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET. BACKFILL TRENCH WITH CLASS I CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22

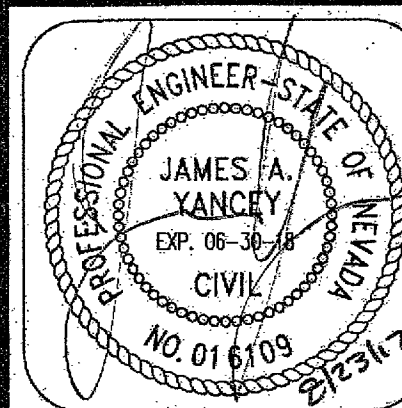
DROP INLET NOTE

WHERE 10-FOOT PARALLEL SEPARATION IS NOT PRACTICABLE
CAST-IN-PLACE MONOLITHIC POUR WITH WATERSTOP BETWEEN SLAB AND WALLS BASE, WALLS AND TOP TO BE CONSTRUCTED WITH WATERSTOPS, CENTER BUILT, OR FLAT STRIP (VINYLEX, GREENSTREAK PLASTIC PRODUCTS OR APPROVED EQUAL)

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
DATE: 8/21/17 PROJECT NO: 124806
LAWMO APPROVED FIRE FLOW 1,500 GPM AT 20-PSI RESIDUAL

COLLINS ENGINEERS
3130 S. DURANGO DR., SUITE 404
LAS VEGAS, NV 89117
PHONE: (702) 248-8000
FAX: (702) 248-8070
WWW.COLLINSENGR.COM



IMPROVEMENT PLANS FOR
THE HOWARD HUGHES COMPANY, LLC
APN: 137-33-601-001
UTILITY LATERALS 2
SUMMERLIN VILLAGE 24 - CROSSBRIDGE DRIVE UNIT 3
CITY OF LAS VEGAS

NO.	DATE	DESIGN BY	DESCRIPTION
1	12/27/17	J. SALDIVAR	REVISED SS & SD LOCATION
2	02/13/18	J. SALDIVAR	REVISED FH LOCATION
3	04/21/18	J. SALDIVAR	REVISED FH LOCATION
4	04/21/18	J. SALDIVAR	REVISED FH LOCATION
5	04/21/18	J. SALDIVAR	REVISED FH LOCATION
6	04/21/18	J. SALDIVAR	REVISED FH LOCATION
7	04/21/18	J. SALDIVAR	REVISED FH LOCATION
8	04/21/18	J. SALDIVAR	REVISED FH LOCATION
9	04/21/18	J. SALDIVAR	REVISED FH LOCATION
10	04/21/18	J. SALDIVAR	REVISED FH LOCATION
11	04/21/18	J. SALDIVAR	REVISED FH LOCATION
12	04/21/18	J. SALDIVAR	REVISED FH LOCATION
13	04/21/18	J. SALDIVAR	REVISED FH LOCATION
14	04/21/18	J. SALDIVAR	REVISED FH LOCATION
15	04/21/18	J. SALDIVAR	REVISED FH LOCATION
16	04/21/18	J. SALDIVAR	REVISED FH LOCATION
17	04/21/18	J. SALDIVAR	REVISED FH LOCATION
18	04/21/18	J. SALDIVAR	REVISED FH LOCATION
19	04/21/18	J. SALDIVAR	REVISED FH LOCATION
20	04/21/18	J. SALDIVAR	REVISED FH LOCATION
21	04/21/18	J. SALDIVAR	REVISED FH LOCATION
22	04/21/18	J. SALDIVAR	REVISED FH LOCATION
23	04/21/18	J. SALDIVAR	REVISED FH LOCATION
24	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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26	04/21/18	J. SALDIVAR	REVISED FH LOCATION
27	04/21/18	J. SALDIVAR	REVISED FH LOCATION
28	04/21/18	J. SALDIVAR	REVISED FH LOCATION
29	04/21/18	J. SALDIVAR	REVISED FH LOCATION
30	04/21/18	J. SALDIVAR	REVISED FH LOCATION
31	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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41	04/21/18	J. SALDIVAR	REVISED FH LOCATION
42	04/21/18	J. SALDIVAR	REVISED FH LOCATION
43	04/21/18	J. SALDIVAR	REVISED FH LOCATION
44	04/21/18	J. SALDIVAR	REVISED FH LOCATION
45	04/21/18	J. SALDIVAR	REVISED FH LOCATION
46	04/21/18	J. SALDIVAR	REVISED FH LOCATION
47	04/21/18	J. SALDIVAR	REVISED FH LOCATION
48	04/21/18	J. SALDIVAR	REVISED FH LOCATION
49	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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66	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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68	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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71	04/21/18	J. SALDIVAR	REVISED FH LOCATION
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79	04/21/18	J. SALDIVAR	REVISED FH LOCATION
80	04/21/18	J. SALDIVAR	REVISED FH LOCATION
81	04/21/18	J. SALDIVAR	REVISED FH LOCATION
82	04/21/18	J. SALDIVAR	REVISED FH LOCATION
83	04/21/18	J. SALDIVAR	REVISED FH LOCATION
84	04/21/18	J. SALDIVAR	REVISED FH LOCATION
85	04/21/18	J. SALDIVAR	REVISED FH LOCATION
86	04/21/18	J. SALDIVAR	REVISED FH LOCATION
87	04/21/18	J. SALDIVAR	REVISED FH LOCATION
88	04/21/18	J. SALDIVAR	REVISED FH LOCATION
89	04/21/18	J. SALDIVAR	REVISED FH LOCATION
90	04/21/18	J. SALDIVAR	REVISED FH LOCATION
91	04/21/18	J. SALDIVAR	REVISED FH LOCATION
92	04/21/18	J. SALDIVAR	REVISED FH LOCATION
93	04/21/18	J. SALDIVAR	REVISED FH LOCATION
94	04/21/18	J. SALDIVAR	REVISED FH LOCATION
95	04/21/18	J. SALDIVAR	REVISED FH LOCATION
96	04/21/18	J. SALDIVAR	REVISED FH LOCATION
97	04/21/18	J. SALDIVAR	REVISED FH LOCATION
98	04/21/18	J. SALDIVAR	REVISED FH LOCATION
99	04/21/18	J. SALDIVAR	REVISED FH LOCATION
100	04/21/18	J. SALDIVAR	REVISED FH LOCATION