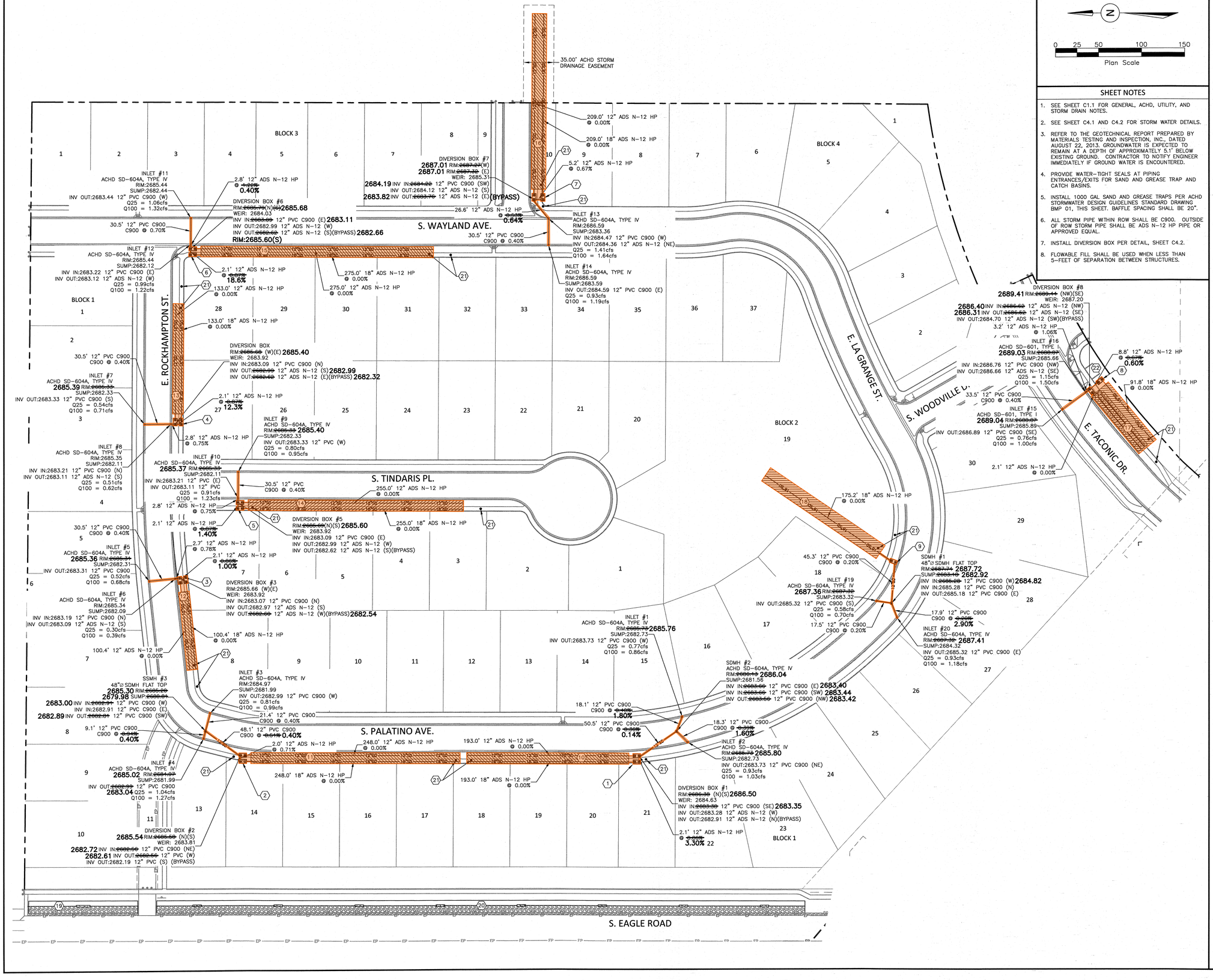


N

0 25 50 100 150

Plan Scale

SHEET NOTES

1. SEE SHEET C1.1 FOR GENERAL, ACHD, UTILITY, AND STORM DRAIN NOTES.
2. SEE SHEET C4.1 AND C4.2 FOR STORM WATER DETAILS.
3. REFER TO THE GEOTECHNICAL REPORT PREPARED BY MATERIALS TESTING AND INSPECTION, INC., DATED AUGUST 22, 2013. GROUNDWATER IS EXPECTED TO REMAIN AT A DEPTH OF APPROXIMATELY 5.1' BELOW EXISTING GROUND. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF GROUND WATER IS ENCOUNTERED.
4. PROVIDE WATER-TIGHT SEALS AT PIPING ENTRANCES/EXITS FOR SAND AND GREASE TRAP AND CATCH BASINS.
5. INSTALL 1000 GAL SAND AND GREASE TRAPS PER ACHD STORMWATER DESIGN GUIDELINES STANDARD DRAWING BMP 01, THIS SHEET. BAFFLE SPACING SHALL BE 20".
6. ALL STORM PIPE WITHIN ROW SHALL BE C900. OUTSIDE OF ROW STORM PIPE SHALL BE ADS N-12 HP PIPE OR APPROVED EQUAL.
7. INSTALL DIVERSION BOX PER DETAIL, SHEET C4.2.
8. FLOWABLE FILL SHALL BE USED WHEN LESS THAN 5-FEET OF SEPARATION BETWEEN STRUCTURES.

KEYNOTES (#)

1. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #1)
   RIM = ~~2686.82~~ (N)(S)**2686.45**
   INV IN = ~~2683.26~~ (E) (12" ADS N-12)**2683.35**
   INV OUT = ~~2682.44~~ (N) (18" ADS N-12)**2682.32**
   OUTLET BAFFLE = 2683.16
   INLET BAFFLE = 2682.58
2. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #2).
   RIM = ~~2686.79~~ (N)(S) **2685.62**
   INV IN = 2682.55 (E) (12" ADS N-12)
   INV OUT = ~~2681.79~~ (S) (18" ADS N-12)**2681.44**
   OUTLET BAFFLE = 2682.45
   INLET BAFFLE = 2681.87
3. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #3).
   RIM = 2685.81 (W)(E)
   INV IN = 2682.95 (N) (12" ADS N-12)
   INV OUT = ~~2682.10~~ (W) (18" ADS N-12)**2681.92**
   OUTLET BAFFLE = 2682.85
   INLET BAFFLE = 2682.27
4. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #4).
   RIM = ~~2685.98~~ (W)(E)**2685.75**
   INV IN = ~~2682.98~~ (N) (12" ADS N-12)**2682.73**
   INV OUT = ~~2682.12~~ (E) (18" ADS N-12) **2681.80**
   OUTLET BAFFLE = 2682.87
   INLET BAFFLE = 2682.29
5. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #5).
   RIM = ~~2685.03~~ (N)(S)**2685.86**
   INV IN = ~~2682.03~~ (E) (12" ADS N-12)**2682.96**
   INV OUT = ~~2682.12~~ (S) (18" ADS N-12) **2681.86**
   OUTLET BAFFLE = 2682.87
   INLET BAFFLE = 2682.29
6. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #6).
   RIM = ~~2685.09~~ (N)(S)**2686.12**
   INV IN = ~~2682.09~~ (E) (12" ADS N-12)**2682.60**
   INV OUT = ~~2682.12~~ (S) (18" ADS N-12) **2682.23**
   OUTLET BAFFLE = 2682.87
   INLET BAFFLE = 2682.29
7. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #7).
   RIM = ~~2687.14~~ (W) **2687.37**
   RIM = ~~2687.50~~ (E) **2687.34**
   INV IN = 2684.09 (N) (12" ADS N-12)
   INV OUT = ~~2683.24~~ (E) (18" ADS N-12)**2683.00**
   OUTLET BAFFLE = 2683.99
   INLET BAFFLE = 2683.41
8. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #8).
   RIM = ~~2689.84~~ (NW)(SE)**2689.53**
   INV IN = ~~2686.42~~ (N) (12" ADS N-12)**2686.36**
   INV OUT = ~~2685.62~~ (W) (18" ADS N-12)**2685.38**
   OUTLET BAFFLE = 2686.37
   INLET BAFFLE = 2685.54
9. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #10).
   RIM = ~~2688.06~~ (N)**2688.22**
   RIM = ~~2688.16~~ (S) **2687.98**
   INV IN = ~~2685.00~~ (W) (12" ADS N-12)**2685.08**
   INV OUT = ~~2684.24~~ (N) (18" ADS N-12) **2683.81**
   OUTLET BAFFLE = 2684.99
   INLET BAFFLE = 2684.41
10. SB #1, SEE DETAIL ON SHEET C4.2 (188'L x 12.5'W x 3.5' D)
11. SB #2, SEE DETAIL ON SHEET C4.1 (243'L x 12.5'W x 3.5' D)
12. SB #3, SEE DETAIL ON SHEET C4.1 (91'L x 12.5'W x 3.5' D)
13. SB #4, SEE DETAIL ON SHEET C4.1 (128'L x 12.5'W x 3.5' D)
14. SB #5, SEE DETAIL ON SHEET C4.1 (250'L x 12.5'W x 3.5' D)
15. SB #6, SEE DETAIL ON SHEET C4.1 (270'L x 12.5'W x 3.5' D)
16. SB #7, SEE DETAIL ON SHEET C4.1 (204'L x 16.5'W x 3.9' D)
17. SB #8, W/ 31 CHAMBERS, SEE DETAIL ON SHEET C4.2 (87'L x 24.5'W x 3.5' D)
18. SB #9, SEE DETAIL ON SHEET C4.1 (161'L x 18.5'W x 3.0' D)
19. INSTALL 127 LF BORROW DITCH PER DETAIL SHEET C2.10 (SW #1). INSTALL ONE (1) – 16'Lx2'W SAND WINDOWS.
20. INSTALL 753 LF OF BORROW DITCH PER DETAIL SHEET C2.10 (SW #2). INSTALL EIGHT (8) – 10'Lx2'W SAND WINDOWS.
21. INSTALL GROUND WATER OBSERVATION WELL PER DETAIL, SHEET C4.2. MONITORING WELL SHALL CONFORM TO THE SPECIFICATIONS AND REQUIREMENTS PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL 7. MONITORING WELL LID SHALL BE MORRIS INDUSTRIES INC., OR APPROVED EQUIVALENT WITH CONCRETE COLLAR SET FLUSH WITH FINISH GRADE. THE PORTION OF THE PIPE LYING IN DRAINAGE SAND MUST BE WRAPPED IN A DRAINAGE GEOTEXTILE, TYPE I PER ISPWC SECTION 2060. OBSERVATION WELLS INSIDE SEEPAGE BED MUST EXTEND A MINIMUM OF 1' BELOW THE BOTTOM OF THE SAND AND MUST BE PLACED WITHIN THE INFILTRATION BED 5' FROM THE END. OUTSIDE OBSERVATION WELL MUST BE PLACED A MINIMUM OF 20' FROM THE PERIMETER OF THE BED.
22. INSTALL 14' WIDE CONCRETE DRIVEWAY APPROACH PER DETAIL, SHEET C2.13. CONCRETE SIDEWALK SHALL BE 6" THICK IN THE AREA ABUTTING THE ACCESS DRIVE. INSTALL GRASS PAVERS (GRASSPAVE2 OR APPROVED EQUAL) FOR MAINTENANCE ACCESS BEYOND CONCRETE APPROACH AND SIDEWALK PER DETAIL, SHEET C4.1.

RECORD DRAWINGS

THIS RECORD DRAWING HAS BEEN PREPARED, IN PART BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE DESIGN PROFESSIONAL CANNOT ASSURE ITS ACCURACY, AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DRAWING OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

PROFESSIONAL ENGINEER — STATE OF IDAHO — 10821 — 12/17/14 — KEVIN P. MCCARTHY

REVISIONS NO.	ITEM	DATE
1	ACHD AND CITY OF MERIDIAN COMMENTS	2/25/15
2	REMOVED EAGLE RD. AND TACONIC FROM PROJECT	03/30/15
3	REVISED SEWER PLANS	4/7/15
4	TACONIC DR. AND EAGLE RD. REVISIONS	4/22/15
5	ACHD COMMENTS	5/13/15

HILL'S CENTURY FARM SUBDIVISION - PHASE I
MERIDIAN, IDAHO
STORM WATER IMPROVEMENT PLANS

DRAWING STATUS:

RECORD DRAWINGS

km ENGINEERING
ENGINEERS . SURVEYORS . PLANNERS
9233 WEST STATE STREET
BOISE, IDAHO 83714
PHONE (208) 639-6939
FAX (208) 639-6930

DESIGN BY:	LCK
DRAWN BY:	LCK/AFN
CHECKED BY:	KPM
DATE:	12/17/14
PROJECT:	14-031

SHEET NO.

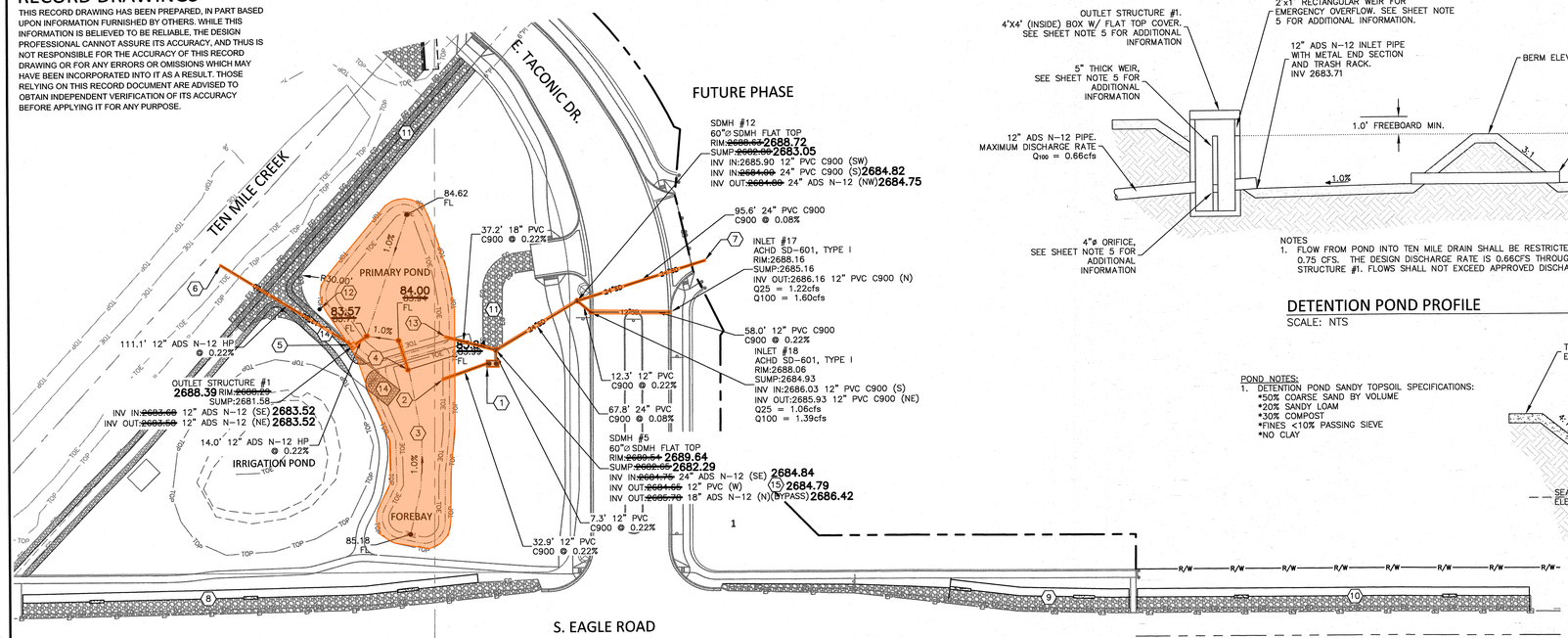
C4.0

RECORD DRAWINGS

P:\14-031\CAD\AS-BUILTS\PHASE I\14-031 STORM.DWG, ANDREW NEWELL, 1/6/2016, OCE FLOTWAVE 360 PCS_24X36 I

RECORD DRAWINGS

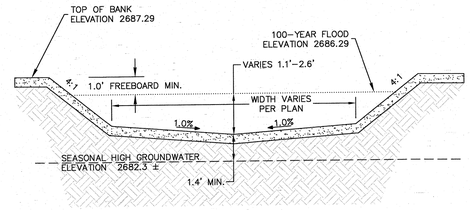
THIS RECORD DRAWING HAS BEEN PREPARED, IN PART BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE DESIGN PROFESSIONAL CANNOT ASSURE ITS ACCURACY, AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DRAWING OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.



NOTES
1. FLOW FROM POND INTO TEN MILE DRAIN SHALL BE RESTRICTED TO THE PRE-DEVELOPMENT RATE OF 0.75 CFS. THE DESIGN DISCHARGE RATE IS 0.66CFS THROUGH A 4"ø ORIFICE WITHIN OUTLET STRUCTURE #1. FLOWS SHALL NOT EXCEED APPROVED DISCHARGE RATE.

DETENTION POND PROFILE
SCALE: NTS

POND NOTES:
1. DETENTION POND SANDY TOPSOIL SPECIFICATIONS:
   - *50% COARSE SAND BY VOLUME
   - *20% SANDY LOAM
   - *30% COMPOST
   - *FINES <10% PASSING SIEVE
   - *NO CLAY



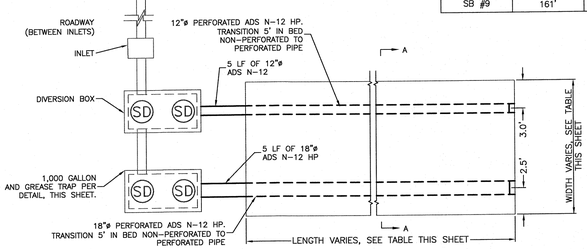
NOTE:
1. HIGH GROUNDWATER IS BASED UPON A SOILS INVESTIGATION BY MATERIALS TESTING AND INSPECTION DATED AUGUST 22, 2013.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF GROUNDWATER IS ENCOUNTERED ABOVE THE ANTICIPATED SEASONAL HIGH GROUNDWATER ELEVATION.

FOREBAY/PRIMARY POND SECTION
SCALE: NTS

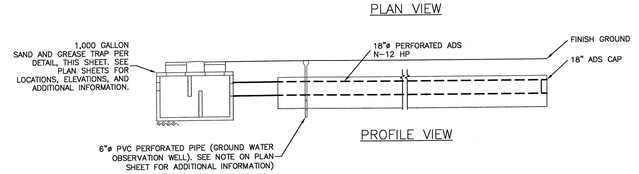
GENERAL NOTES
1. REFER TO THE GEOTECHNICAL REPORT PREPARED BY MATERIALS TESTING AND INSPECTION, INC., DATED AUGUST 22, 2013. GROUNDWATER IS EXPECTED TO REMAIN AT A DEPTH OF APPROXIMATELY 5.1' BELOW EXISTING GROUND. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF GROUNDWATER IS ENCOUNTERED.
2. CONTACT DESIGN ENGINEER FOR INFILTRATION BED REDESIGN IF GROUNDWATER IS ENCOUNTERED ABOVE MAX HSGW ELEVATION.
3. ALL MANHOLES AND SAND AND GREASE TRAPS SHALL BE HS25 OR GREATER LOAD RATED.
4. ALL GEOTEXTILE SEAMS SHALL OVERLAP 1 FOOT MINIMUM.
5. BED WIDTH SHALL REMAIN CONSTANT.
6. THE MINIMUM DESIGN PERCOLATION RATE FOR THE STORM DRAIN FACILITY IS 8.0 IN/HR TO MEET THE REQUIREMENT OF 90% VOLUME WITHIN 24HR AND SHALL BE VERIFIED IN FIELD.
7. IF ROCK IS ENCOUNTERED, CONTRACTOR MUST HAVE A PERCOLATION TEST PERFORMED BY A SOILS ENGINEER AFTER SEEPAGE BED IS FULLY EXCAVATED. (NOTE: AN ACHD INSPECTOR MUST BE PRESENT FOR THE TEST). IF THE PERCOLATION IS LESS THAN SPECIFIED BY THE SOILS REPORT AND ENGINEER, CONTRACTOR MAY NEED TO BLAST OR BORE TO CREATE CONDUIT FOR DRAINAGE TO OCCUR OR RE-DESIGN THE SYSTEM TO ACHIEVE THE REQUIRED INFILTRATION.
8. STORAGE VOLUME DOESN'T INCLUDE SAND WINDOW.
9. WATER SERVICES, SEWER SERVICES, AND PRESSURE IRRIGATION MAINS CROSSING SEEPAGE BEDS SHALL BE INSTALLED PER DETAIL, SHEET C4.2. NO PENETRATIONS OF BED LINER WILL BE ALLOWED.

SEEPAGE BED TABLE

SEEPAGE BED	BED LENGTH	BED WIDTH	BED DEPTH	ELEVATION "A"	ELEVATION "B"	ELEVATION "C"	ELEVATION "D"	ELEVATION "E"	ELEVATION "F"	GROUND WATER EL.	100-YR VOLUME PROVIDED
SB #1	188'	12.5'	3.5'	2686.38	2685.13	2682.~~44~~2.32	2681.63	2681.57	2682.91	2680.6±	2,964 CF
SB #2	243'	12.5'	3.5'	2685.56	2684.31	2681.~~69~~1.44	2680.81	2680.75	2682.19	2680.6±	3,820 CF
SB #3	91'	12.5'	3.5'	2685.67	2684.42	2682.~~41~~1.92	2680.92	2680.86	2682.~~62~~2.54	2680.6±	1,429 CF
SB #4	128'	12.5'	3.5'	2685.67	2684.42	2682.~~41~~1.80	2680.92	2680.86	2682.~~62~~2.32	2680.6±	2,019 CF
SB #5	250'	12.5'	3.5'	2685.67	2684.42	2682.~~41~~1.86	2680.92	2680.86	2682.62	2680.6±	3,930 CF
SB #6	270'	12.5'	3.5'	2685.78	2684.53	2683.~~42~~2.23	2681.03	2680.97	2682.~~64~~2.66	2680.6±	4,252 CF
SB #7	204'	16.5'	3.9'	2687.31	2685.81	2683.~~24~~3.00	2681.91	2681.85	2683.~~74~~3.82	2681.8±	4,836 CF
SB #9	161'	18.5'	3.0'	2688.35	2686.85	2684.~~24~~3.81	2683.85	2683.70	–	2683.7±	2,951 CF

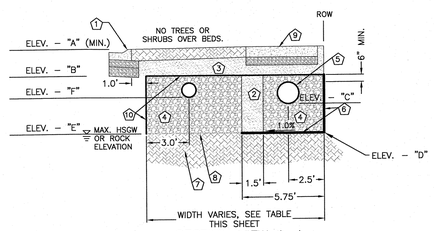


PLAN VIEW



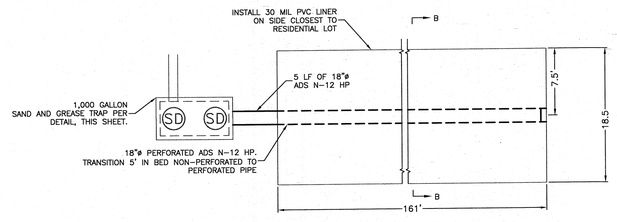
PROFILE VIEW

KEY
1. 3" ROLLED CURB AND GUTTER PER ROADWAY PLANS.
2. ISPWC 801 OR ASTM C33 FILTER SAND. WRAP WITH WOVEN FABRIC PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL BMP 04.
3. MINIMUM OF 1.25-FT COVER FROM TOP OF BED TO FINISH GRADE.
4. 2" DRAIN ROCK.
5. 18"ø PERFORATED PIPE. INSTALL PERFORATIONS PER ACHD STORMWATER DESIGN GUIDELINES DETAIL BMP 04.
6. 30 MIL PVC LINER.
7. SUITABILITY OF SUBGRADE TO BE VERIFIED BY GEOTECHNICAL ENGINEER.
8. EXTEND 2' (MIN.) INTO FREE DRAINING MATERIAL.
9. 5' SIDEWALK PER ROADWAY PLANS.
10. NON-WOVEN FABRIC PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL BMP 04. OVERLAP MINIMUM OF 1-FT TOP AND SIDES ONLY.
11. 12" ø PERFORATED BYPASS PIPE. INSTALL PERFORATIONS PER ACHD STORMWATER DESIGN GUIDELINES DETAIL BMP 04

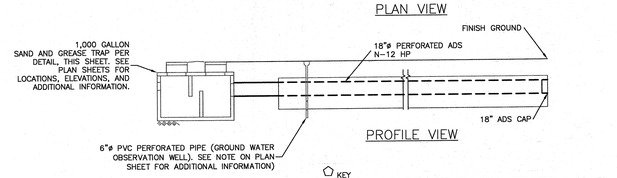


SECTION VIEW A-A

SEEPAGE BED (SB #1-7)
NTS

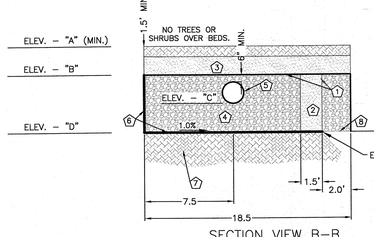


PLAN VIEW



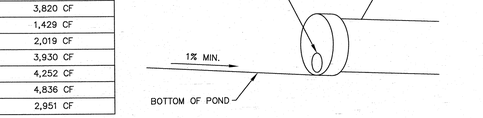
PROFILE VIEW

KEY
1. NON-WOVEN FABRIC PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL BMP 04. OVERLAP MINIMUM OF 1-FT TOP AND SIDES ONLY.
2. ISPWC 801 OR ASTM C33 FILTER SAND. WRAP WITH WOVEN FABRIC PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL BMP 04.
3. MINIMUM OF 1.5-FT COVER FROM TOP OF BED TO FINISH GRADE.
4. 2" DRAIN ROCK.
5. 18"ø PERFORATED PIPE. INSTALL PERFORATIONS PER ACHD STORMWATER DESIGN GUIDELINES DETAIL BMP 04.
6. INSTALL 30 MIL PVC LINER ON SIDE CLOSEST TO RESIDENTIAL LOT.
7. SUITABILITY OF SUBGRADE TO BE VERIFIED BY GEOTECHNICAL ENGINEER.
8. EXTEND 2' (MIN.) INTO FREE DRAINING MATERIAL.

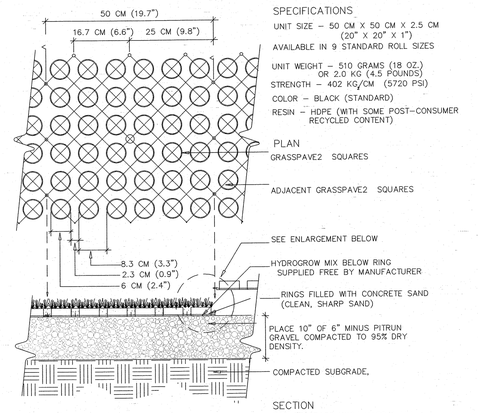


SECTION VIEW B-B

SEEPAGE BED (SB #9)
NTS

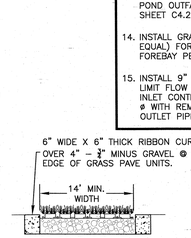


END CAP WITH ORIFICE DETAIL
SCALE: NTS

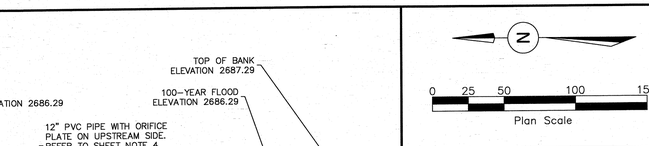


NOTE:
1. CONSTRUCT TYPE 2 GRASS PAVER ACCESS ROAD PER ACHD STORMWATER DESIGN GUIDELINES STANDARD DRAWING, DETAIL 5.
2. REFER TO LANDSCAPE PLAN FOR GRASS TYPE.

GRASSPAVE2 DETAIL
SCALE: NTS



ACCESS ROAD DELINEATION



SHEET NOTES

1. SEE SHEET C1.1 FOR GENERAL, ACHD, UTILITY, AND STORM DRAIN NOTES.
2. REFER TO THE GEOTECHNICAL REPORT PREPARED BY MATERIALS TESTING AND INSPECTION, INC., DATED AUGUST 22, 2013. GROUNDWATER IS EXPECTED TO REMAIN AT A DEPTH OF APPROXIMATELY 5.1' BELOW EXISTING GROUND. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF GROUND WATER IS ENCOUNTERED.
3. PROVIDE WATER-TIGHT SEALS AT PIPING ENTRANCES/EXITS FOR SAND AND GREASE TRAP AND CATCH BASINS.
4. INSTALL SAND AND GREASE TRAP PER ACHD STORMWATER DESIGN GUIDELINES STANDARD DRAWING BMP 01, SHEET C4.2. BAFFLE SPACING SHALL BE 20".
5. ALL STORM PIPE WITHIN ROW SHALL BE C900. OUTSIDE OF ROW STORM PIPE SHALL BE ADS N-12 HP PIPE OR APPROVED EQUAL.

KEYNOTES (#)

1. INSTALL 1500 GAL SAND AND GREASE TRAP (SGT #9).
   RIM = ~~2689.54~~ 2690.30(N)
   INV IN = 2684.64 (E) (12" C900)
   INV OUT = ~~2684.44~~ (N) (12" C900) 2684.41
   OUTLET BAFFLE = 2684.54
   INLET BAFFLE = 2683.96
   RIM = 2690.09(S)
2. OUTFALL
   INV OUT = ~~2684.30~~ 2684.15
   PROVIDE METAL END SECTION AND TRASH RACKS FOR POND OUTFALL. INSTALL FLOW SPREADER PER DETAIL, SHEET C4.2.
3. INSTALL DETENTION POND PER DETAILS, THIS SHEET.
   FOREBAY VOLUME PROVIDED = 6,566 CF
   PRIMARY VOLUME PROVIDED = 10,776 CF
   TOTAL VOLUME PROVIDED = 17,343 CF
   TOTAL VOLUME REQUIRED = 17,229 CF
4. INSTALL 12.0 LF 12" ADS N-12 @ 0.22% WITH END CAP AND 4" ORIFICE PER DETAIL, THIS SHEET.
   INV = ~~2683.99~~ (UPSTREAM) 2683.84
   INV = ~~2683.84~~ (DOWNSTREAM) 2684.00
5. OUTLET STRUCTURE #1.
   4'X4' (INSIDE) BOX W/ FLAT TOP COVER.
   RIM = 2688.29 (TOP OF LID)
   INV IN (SE) = 2686.29 (2'W X 1'H RECT ORIFICE)
   INV IN (SE) = 2683.68 (12" ADS N-12)
   INV OUT (NE) = 2683.58 (12" ADS N-12)
   CONCRETE WEIR
   TOP ELEV = 2686.29
   INV OUT = 2683.58 (4"ø ORIFICE)
   SUMP = 2681.58
6. OUTFALL
   INV OUT = ~~2683.34~~ 2683.16
   INSTALL METAL END SECTION AND TRASH RACK.
   MAXIMUM ALLOWED DISCHARGE RATE FOR THE 100-YEAR EVENT IS 0.75 CFS. DESIGN DISCHARGE RATE IS 0.66 CFS.

   TEN MILE CREEK WATER SURFACE ELEVATIONS:
   NORMAL: 2680.70
   10-YR: 2683.89
   20-YR: 2684.28
   25-YR: 2684.42
   50-YR: 2684.82
   100-YR: 2685.23
7. STUB 24-INCH STORM PIPE FOR FUTURE CONNECTION WITH WATER TIGHT PLUG.
   INV. = 2684.98
   MAXIMUM Q_{100} = 7.96 CFS
   MAXIMUM Q_{25} = 6.36 CFS
   MAXIMUM Q_{WQ} = 3.24 CFS

   TOTAL 100-YEAR VOLUME (FUTURE DEVELOPMENT) = 15,769 CF
8. INSTALL 328 LF OF BORROW DITCH PER DETAIL SHEET C2.10 (SW #3). INSTALL TWO (2) – 10'Lx2'W AND ONE (1) 15'x2'W SAND WINDOWS.
9. INSTALL 128 LF OF BORROW DITCH PER DETAIL SHEET C2.10 (SW #4). INSTALL TWO (2) – 15'Lx2'W SAND WINDOWS.
10. INSTALL 280 LF OF BORROW DITCH PER DETAIL SHEET C2.10 (SW #5). INSTALL TWO (2) – 10'Lx2'W SAND WINDOWS.
11. INSTALL 14' WIDE GRAVEL MAINTENANCE ROAD, TYPE 3, PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200, DETAIL 5, FOR ACHD MAINTENANCE.
12. INSTALL GROUND WATER OBSERVATION WELL PER DETAIL, SHEET C4.2. MONITORING WELL SHALL CONFORM TO THE SPECIFICATIONS AND REQUIREMENTS PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL 7. MONITORING WELL LID SHALL BE MORRIS INDUSTRIES INC., OR APPROVED EQUIVALENT WITH CONCRETE COLLAR SET FLUSH WITH FINISH GRADE. THE PORTION OF THE PIPE LYING IN DRAINAGE SAND MUST BE WRAPPED IN A DRAINAGE GEOTEXTILE, TYPE I PER ISPWC SECTION 2060.
13. OUTFALL
    INV OUT = ~~2685.79~~ 2685.54
    PROVIDE METAL END SECTION AND TRASH RACKS FOR POND OUTFALL. INSTALL FLOW SPREADER PER DETAIL, SHEET C4.2.
14. INSTALL GRASS PAVERS (GRASSPAVE2 OR APPROVED EQUAL) FOR MAINTENANCE ACCESS ROAD AND RAMP TO FOREBAY PER DETAIL, THIS SHEET.
15. INSTALL 9" ORIFICE PLATE ON PIPE INLET TO SGT #9 TO LIMIT FLOW RATE TO 4.15 CFS. PEDRO PLASTICS FRAMED INLET CONTROL DEVICE FOR 60"ø MANHOLE (12" OUTER ø WITH REMOVABLE 9"ø ORIFICE PLATE CENTERED ON OUTLET PIPE), OR APPROVED EQUIVALENT.

REVISIONS

NO.	ITEM	DATE
1	ACHD AND CITY OF MERIDIAN COMMENTS	2/25/15
2	REMOVED EAGLE RD. AND TACONIC FROM PROJECT	03/26/15
3	REVISED SEWER PLANS	4/7/15
4	TACONIC DR. AND EAGLE RD. REVISIONS	4/22/15
5	ACHD COMMENTS	5/13/15

PROFESSIONAL ENGINEER
10821
STATE OF IDAHO
KEVIN P. MCCARTHY

HILL'S CENTURY FARM SUBDIVISION - PHASE I
MERIDIAN, IDAHO

STORM WATER IMPROVEMENT PLANS

DRAWING STATUS:
RECORD DRAWINGS

km ENGINEERING
ENGINEERS . SURVEYORS . PLANNERS
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BOISE, IDAHO 83714
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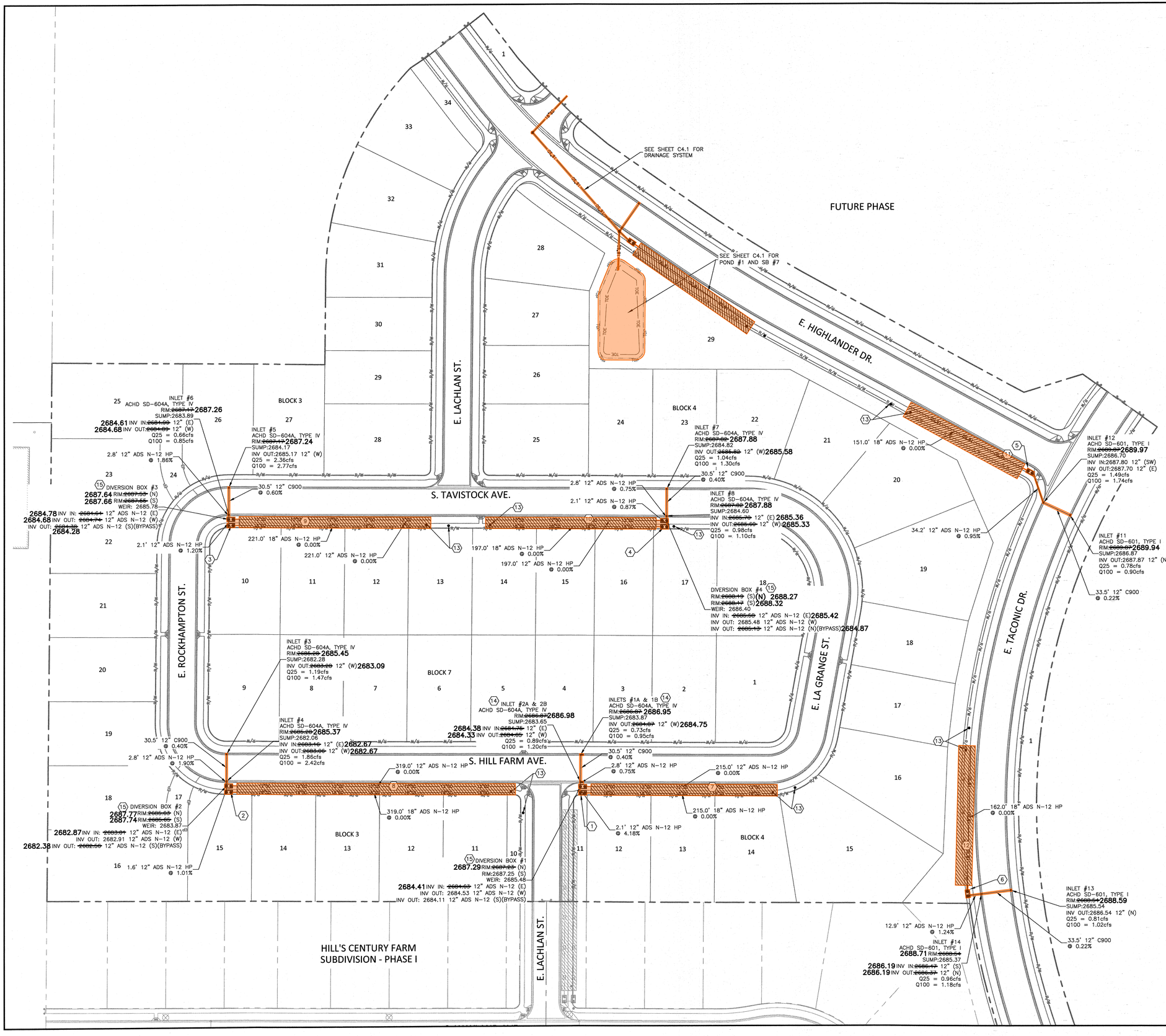
DESIGN BY:	LCK
DRAWN BY:	LCK/AFN
CHECKED BY:	KPM
DATE:	12/17/14
PROJECT:	14-031

SHEET NO.
C4.1

RECORD DRAWINGS

P:\14-031\CAD\AS-BUILTS\PHASE 1\14-031 STORM.DWG, ANDREW MEWELL, 2/6/2026, DEE PLOTWAVE 360 PC3, ARCH E 1



0 25 50 100 150

Plan Scale

SHEET NOTES

1. SEE SHEET C1.1 FOR GENERAL, ACHD, UTILITY, AND STORM DRAIN NOTES.
2. SEE SHEET C4.1 AND C4.2 FOR STORM WATER DETAILS.
3. REFER TO THE GEOTECHNICAL REPORT PREPARED BY MATERIALS TESTING AND INSPECTION, INC., DATED AUGUST 22, 2013. GROUNDWATER IS EXPECTED TO REMAIN AT A DEPTH OF APPROXIMATELY 6.1'–8.5' BELOW EXISTING GROUND. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF GROUND WATER IS ENCOUNTERED.
4. PROVIDE WATER–TIGHT SEALS AT PIPING ENTRANCES/EXITS FOR SAND AND GREASE TRAP AND CATCH BASINS.
5. INSTALL 1000 GAL SAND AND GREASE TRAPS PER ACHD STORMWATER DESIGN GUIDELINES STANDARD DRAWING BMP 01, SHEET C4.2. BAFFLE SPACING SHALL BE 20".
6. ALL STORM PIPE WITHIN ROW SHALL BE C900. OUTSIDE OF ROW STORM PIPE SHALL BE ADS N-12 HP PIPE OR APPROVED EQUAL.

KEYNOTES (#)

1. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #1)
   RIM = 2687.36 (N)
   RIM = 2687.38 (S)
   INV IN = 2684.44 (E) (12" ADS N–12)
   INV OUT = ~~2683.61~~ (S) (18" ADS N–12) **2683.51**
   OUTLET BAFFLE = 2684.34
   INLET BAFFLE = 2683.26
2. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #2).
   RIM = 2685.76 (N)
   RIM = 2685.78 (S)
   INV IN = ~~2682.99~~ (E) (12" ADS N–12) **2682.81**
   INV OUT = 2682.06 (S) (18" ADS N–12) **2681.75**
   OUTLET BAFFLE = 2682.79
   INLET BAFFLE = 2682.21
3. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #3).
   RIM = 2687.66 (N)
   RIM = 2687.69 (S)
   INV IN = 2684.71 (E) (12" ADS N–12)
   INV OUT = ~~2683.89~~ (S) (18" ADS N–12) **2683.81**
   OUTLET BAFFLE = 2684.61
   INLET BAFFLE = 2684.03
4. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #4).
   RIM = 2688.32 (N)
   RIM = 2688.30 (S)
   INV IN = ~~2685.45~~ (E) (12" ADS N–12) **2685.36**
   INV OUT = ~~2684.63~~ (N) (18" ADS N–12) **2683.44**
   OUTLET BAFFLE = 2685.36
   INLET BAFFLE = 2684.78
5. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #5).
   RIM = 2690.90 (NE)
   RIM = ~~2690.83~~ (SW) **2690.90**
   INV IN = ~~2687.37~~ (SW) (12" ADS N–12) **2687.27**
   INV OUT = ~~2686.54~~ (NE) (18" ADS N–12) **2686.62**
   OUTLET BAFFLE = 2687.27
   INLET BAFFLE = 2686.69
6. INSTALL 1000 GAL SAND AND GREASE TRAP (SGT #6).
   RIM = 2689.29 (W)
   RIM = 2689.31 (E)
   INV IN = ~~2686.21~~ (W) (12" ADS N–12) **2686.10**
   INV OUT = ~~2685.38~~ (E) (18" ADS N–12) **2685.50**
   OUTLET BAFFLE = 2686.11
   INLET BAFFLE = 2685.53
7. SB #1 SEE DETAIL ON SHEET C4.2
   (210'L x 12.5'W x 3.75' D)
8. SB #2, SEE DETAIL ON SHEET C4.2
   (314'L x 12.5'W x 4.50' D)
9. SB #3, SEE DETAIL ON SHEET C4.2
   (216'L x 12.5'W x 6.50' D)
10. SB #4, SEE DETAIL ON SHEET C4.2
    (192'L x 12.5'W x 4.50' D)
11. SB #5, SEE DETAIL ON SHEET C4.1
    (146'L x 16.5'W x 4.50' D)
12. SB #6, SEE DETAIL ON SHEET C4.1
    (157'L x 16.5'W x 3.25' D)
13. INSTALL GROUND WATER OBSERVATION WELL PER DETAIL, SHEET C4.2. MONITORING WELL SHALL CONFORM TO THE SPECIFICATIONS AND REQUIREMENTS PER ACHD STORMWATER DESIGN GUIDELINES SECTION 8200 DETAIL 7. MONITORING WELL LID SHALL BE MORRIS INDUSTRIES INC., OR APPROVED EQUIVALENT WITH CONCRETE COLLAR SET FLUSH WITH FINISH GRADE. THE PORTION OF THE PIPE LYING IN DRAINAGE SAND MUST BE WRAPPED IN A DRAINAGE GEOTEXTILE, TYPE I PER ISPWC SECTION 2060. OBSERVATION WELLS INSIDE SEEPAGE BED MUST EXTEND A MINIMUM OF 1' BELOW THE BOTTOM OF THE SAND AND MUST BE PLACED WITHIN THE INFILTRATION BED 5' FROM THE END. OUTSIDE OBSERVATION WELL MUST BE PLACED A MINIMUM OF 20' FROM THE PERIMETER OF THE BED.
14. INSTALL (2) INLET CATCH BASIN TYPE IV (ROLLED CURB) PER ACHD SUPPLEMENTAL STANDARD DRAWING SD–604A OR APPROVED EQUIVALENT. INLETS SHALL BE INTERCONNECTED.
15. REFER TO DIVERSION MANHOLE PER DETAIL, SHEET C4.2.

RECORD DRAWINGS

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PROFESSIONAL ENGINEER — 10821 — STATE OF IDAHO — KEVIN P. McCARTHY

REVISIONS

NO.	ITEM	DATE
1	ACHD AND CITY OF MERIDIAN COMMENTS	3/19/15
2	ACHD AND CITY OF MERIDIAN COMMENTS	4/23/15
3	REVISED STORMWATER PLANS PER ACHD COMMENTS.	5/20/15

HILL'S CENTURY FARM SUBDIVISION - PHASE 2
MERIDIAN, IDAHO

STORM IMPROVEMENT PLANS

DRAWING STATUS:

RECORD DRAWINGS

km ENGINEERING
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9233 WEST STATE STREET
BOISE, IDAHO 83714
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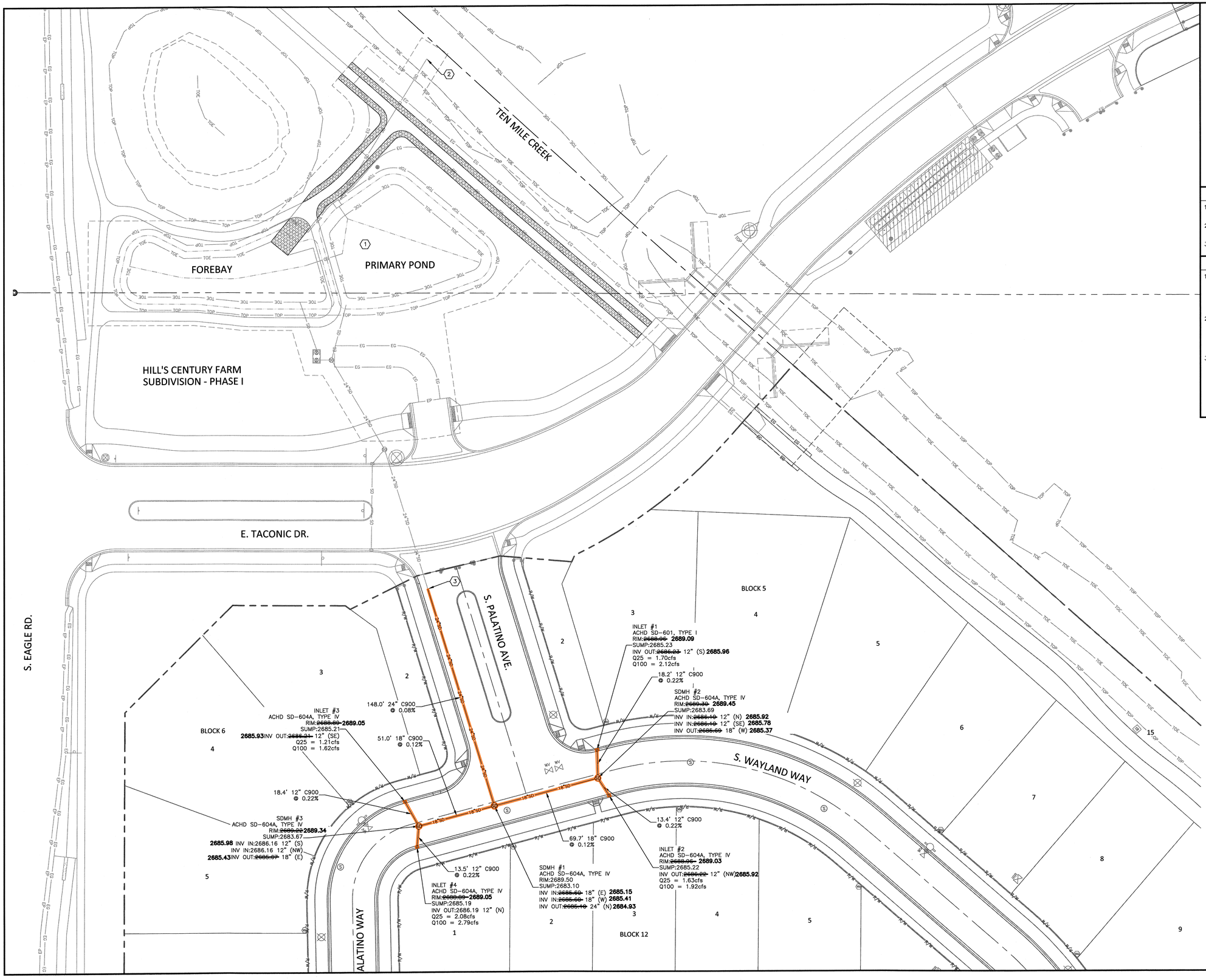
DESIGN BY:	LCK
DRAWN BY:	LCK
CHECKED BY:	KPM
DATE:	1/28/15
PROJECT:	14-031

SHEET NO.

C4.0

RECORD DRAWINGS

P:\14-031\CAD\AS-BUILTS\PHASE 2\14-031 STORM4.DWG, ANDREW NEWELL, 12/16/2015, DEC PLOTWAVE 360.PC3, 24X36 L



SHEET NOTES

1. SEE SHEET C1.1 FOR GENERAL, ACHD, UTILITY, AND STORM DRAIN NOTES.
2. PROVIDE WATER-TIGHT SEALS AT PIPING EXITS FOR CATCH BASINS.
3. ALL STORM PIPE WITHIN ROW SHALL BE C900.

KEYNOTES (#)

1. DETENTION POND TO BE INSTALLED PER PHASE 1 PLANS.
   FOREBAY VOLUME PROVIDED = 6,566 CF
   PRIMARY VOLUME PROVIDED = 10,776 CF
   TOTAL VOLUME PROVIDED = 17,343 CF
   TOTAL VOLUME REQUIRED = 17,181 CF
2. OUTFALL FROM DETENTION POND TO TEN MILE CREEK TO BE INSTALLED PER PHASE 1 PLANS.
   MAXIMUM ALLOWED DISCHARGE RATE FOR THE 100-YEAR EVENT IS 0.75 CFS. DESIGN DISCHARGE RATE IS 0.66 CFS.
3. CONNECT TO EXISTING 24-INCH STORM PIPE.
   INV. = 2685.09
   MAXIMUM Q_{100} = 7.96 CFS (PHASE 3)
   MAXIMUM Q_{25} = 6.36 CFS (PHASE 3)
   MAXIMUM Q_{WQ} = 3.24 CFS (PHASE 3)

   TOTAL 100-YEAR
   VOLUME (PHASE 3) = 15,769 CF

RECORD DRAWINGS

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REGISTERED PROFESSIONAL ENGINEER
KEVIN P. MCCOY
10821
STATE OF IDAHO
9/21/15

REVISIONS

NO.	ITEM	DATE
1	ACHD COMMENTS	7/17/15
2	ACHD AND CITY OF MERIDIAN COMMENTS	8/3/15

HILL'S CENTURY FARM SUBDIVISION - PHASE 3
MERIDIAN, IDAHO
STORM IMPROVEMENT PLAN

DRAWING STATUS:

RECORD DRAWINGS

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CHECKED BY:	KPM
DATE:	6/5/15
PROJECT:	15-041

SHEET NO.
C4.0

RECORD DRAWINGS

P:\14-031\CAD\AS-BUILTS\PHASE 3\14-031 STORM.DWG, LACHLAN KINSELLA, 8/26/2016, DCE PLOTWAVE 360 PCS_22X34 L