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|---|-------------|------------------------|-------------|-----------------------|-------------|------|------------------------------------|----------|--------------------------|---------------|--|
| <div><div>MEDAIR</div><div>AFGHANISTAN MEDAIR WASH Development</div><div>WASH</div></div> | SURVEYED BY | MEDAIR Engineering Dep | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO. <div>X X</div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai Solar Powered Water Supply Network |
| | DESIGNED BY | MEDAIR Engineering Dep | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | SITE PLAN |
| | DRAWN BY | MEDAIR Engineering Dep | APPROVED BY | Eng Wahidullah Majeed | DRAWING NO. | | | VILLAGE | Hassanzai (Nahr-i-Kariz) | | |

Design Data for Hassanzai (Nehr-e-Kariz) village

| S #: | Description | | Quantity | Unit | Remarks |
|------|------------------------------|------------------|--------------|-------------------|---|
| 1 | Number of family | | 202 | Family | |
| 2 | Number of individual/family | | 7 | Person | |
| 3 | Population growth rate | | 3 | % | |
| 4 | Design duration | | 15 | Year | |
| 5 | Demand/capita/day | | 25 | LPCD | |
| 6 | Peak daily demand | | 1 | Time | |
| 7 | Peak hourly demand | | 2 | Hrs | |
| 8 | Current population | | 1414 | Person | |
| 9 | Population (15 years growth) | | 2203.0 | Person | |
| 10 | Water Demand | | 57827.9 | Lit/day | |
| 11 | Water resource discharge | | 2.01 | Lit/sec | |
| 12 | Number of Taps | Number of Family | Waiting Time | Flow in each Taps | Remarks |
| | | (7 individual) | (Second) | Lit/sec | |
| 13 | 53 | 202 | 7200 | 0.28 | Flow in each STP is different based on its existing population. |

تشریح پروژه شبکه آبرسانی قریه حسن زی (نهر کاریز) ولسوالی ژیری ولایت کندهار:

1. تعداد فامیل مجموعی این قریه (202) فامیل در (53) عدد هاوز کنیکشن و (3) باب مسجد که در حدود 125 شاگردان انات و ذکور دارد میباشد.
2. منبع : چای عمیق حفر گردیده است که قرار گزارش سروی مقدار آبدهی آن (2.5) لیتر فی ثانیه میباشد. و کوردینات آن در سایت پلان نشان داده شده است.
3. این شبکه نظر به ضرورت ساحه و آبدهی چاه به شکل شیردهن های خانه به خانه دیزاین گردیده است .
4. طول مجموعی پایپ های این شبکه آبرسانی تقریباً (4567) متر میباشد .
5. جهت ذخیره نمودن آب یک باب ذخیره ارتفاعی آب به حجم (30) متر مکعب از نوع کانکریتی سیخ دار در قریه در نظر گرفته شده. که کوردینات دقیق آن بصورت مشخص در سایت پلان شبکه آبرسانی ذکر گردیده اند.
6. در Site Plan بالائی هر پایپ طول و قطر آن نوشته شده ، همچنان بر علاوه جدول دیگر تحت نام جدول پایپ ها شامل این اسناد بوده که در آن نیز قطر و طول پیپ درج میباشد.
7. تمام کانکریت سخیدار باید مارک 200 داشته باشد که نسبت آن 1:1.5:3 (سمنت:ریگ:جغل) میباشد.
8. تمام کار سنگ کاری باید بامصاله 1:4 (سمنت:ریگ) کار شود.
9. تمام کانکریت بیدون سیخ مارک 150 باشد که نسبت آن 1:2:4 (سمنت:ریگ:جغل) میباشد.
10. تمام کار پلسترکاری داخل ذخیره ضدنفوذ آب باید نسبت 1:3 (سمنت:ریگ) داشته باشد و حداقل 1 کیلوگرام پودر ضد نفوذ آب دریک بوری سمنت مخلوط گردد.
11. کار هنگاف کاری و پلسترکاری باید نسبت 1:3 (سمنت:ریگ) داشته باشد و بام ذخیره را ایزوگام در نظر گرفته شده است.
12. ذخیره یک منهول که مجهز به دروازه فلزی است که قفل شود و از ملوث شدن آب جلوگیری میشود.
13. آب سقف ذخیره و تمام ساختمان های مشابه کشیده شده تا آب باران یابرف این ساختمان ها راتخریب ننماید.
14. جهت ورود به ذخیره یک زینه فلزی است تا در وقت ضرورت جهت پائین شدن به این ساختمان از آن استفاده صورت گیرد.
15. کنندکاری جوی جهت گور نمودن پایپ باید (80) سانتی متر عمیق و 40 سانتی متر عرض دارد خلاصه پایپ باید از عمق یخ بندان پایین تر جابجای شود.
16. پرکاری جویچه پایپ طوری صورت میگردد که بالائی پایپ مواد نرم (خاک نرم و پاک) انداخته میشود تا از متضرر شدن پایپ جلوگیری صورت بگیرد.
17. آب ایکه در کارهای ساختمانی از آن استفاده صورت میگردد کاملاً صاف و پاک است.

| Hydraulic Analysis Data of Hasanzai (Nahr-e-Kariz) Village Solar Powered Water Supply Project | | | | | | | | | | | | |
|---|-------|-------------|-----------|-------------|-----------------|-----------------|---------------|---------------------|-----------------|-------------------|---------------|----------|
| S #: | Label | Start Note: | End Note: | Length (M): | Outer Dia (mm): | Inner Dia (mm): | Materials | Hyziene Williams ©: | Flow (lit/sec): | Velocity (m/sec): | Headloss (M): | Remarks: |
| 1 | P-03 | B 02 | J 03 | 135.93 | 90 | 79.2 | PE100, PN10 | 140 | 3.52 | 0.715 | 0.007 | |
| 2 | P-04 | J 03 | J 04 | 22.47 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 3 | P-05 | J 04 | STP-01 | 12.88 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 4 | P-06 | J 04 | J 05 | 25.73 | 32 | 28.2 | PE100, PN10 | 140 | 0.24 | 0.384 | 0.008 | |
| 5 | P-07 | J 05 | STP-02 | 12.88 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 6 | P-08 | J 05 | B 21(a) | 20.71 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 7 | P-09 | B 21(a) | STP-03 | 56.61 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 8 | P-10 | J 03 | J 06 | 15.08 | 75 | 66 | PE100, PN10 | 140 | 3.16 | 0.924 | 0.015 | |
| 9 | P-100 | J 42 | J 31 | 17.78 | 63 | 55.4 | PE100, PN10 | 140 | 1.52 | 0.631 | 0.009 | |
| 10 | P-101 | J 31 | J 43 | 19.15 | 63 | 55.4 | PE100, PN10 | 140 | 1.52 | 0.631 | 0.009 | |
| 11 | P-102 | J 43 | STP-42 | 58.74 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 12 | P-103 | J 43 | B 33 | 73.98 | 63 | 55.4 | PE100, PN10 | 140 | 1.4 | 0.581 | 0.008 | |
| 13 | P-104 | B 33 | J 44 | 29.3 | 50 | 44 | PE100, PN10 | 140 | 1.4 | 0.921 | 0.024 | |
| 14 | P-105 | J 44 | STP-43 | 41.96 | 25 | 21.4 | PE100, PN10 | 140 | 0.28 | 0.778 | 0.04 | |
| 15 | P-106 | J 44 | J 45 | 11.97 | 50 | 44 | PE100, PN10 | 140 | 1.12 | 0.737 | 0.016 | |
| 16 | P-107 | J 45 | STP-44 | 17.87 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 17 | P-108 | J 45 | B 24 | 22.59 | 50 | 44 | PE100, PN10 | 140 | 1 | 0.658 | 0.013 | |
| 18 | P-109 | B 24 | J 46 | 17.92 | 50 | 44 | PE100, PN10 | 140 | 1 | 0.658 | 0.013 | |
| 19 | P-11 | J 06 | STP-04 | 47.81 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 20 | P-110 | J 46 | STP-45 | 29.49 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 21 | P-111 | J 46 | B 26 | 37.63 | 50 | 44 | PE100, PN10 | 140 | 0.88 | 0.579 | 0.01 | |
| 22 | P-112 | B 26 | J 47 | 54.15 | 50 | 44 | PE100, PN10 | 140 | 0.88 | 0.579 | 0.01 | |
| 23 | P-113 | J 47 | STP-46 | 14.61 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 24 | P-114 | J 47 | B 27 | 34.72 | 50 | 44 | PE100, PN10 | 140 | 0.76 | 0.5 | 0.008 | |
| 25 | P-115 | B 27 | J 48 | 33.76 | 50 | 44 | PE100, PN10 | 140 | 0.76 | 0.5 | 0.008 | |
| 26 | P-116 | J 48 | B 28 | 54.24 | 32 | 28.2 | PE100, PN10 | 140 | 0.24 | 0.384 | 0.008 | |
| 27 | P-117 | B 28 | STP-47 | 50.37 | 25 | 21.4 | PE100, PN10 | 140 | 0.24 | 0.667 | 0.03 | |
| 28 | P-118 | J 48 | J 49 | 55.82 | 40 | 35.2 | PE100, PN10 | 140 | 0.52 | 0.534 | 0.011 | |
| 29 | P-119 | J 49 | STP-48 | 7.59 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.28 | 1.326 | 0.148 | |
| 30 | P-12 | J 06 | J 07 | 11.39 | 75 | 66 | PE100, PN10 | 140 | 3.04 | 0.889 | 0.014 | |
| 31 | P-120 | J 49 | J 49A | 12.19 | 40 | 35.2 | PE100, PN10 | 140 | 0.24 | 0.247 | 0.003 | |
| 32 | P-121 | J 49A | STP-49 | 13 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 33 | P-122 | J 49A | B 29 | 10.23 | 32 | 28.2 | PE100, PN10 | 140 | 0.12 | 0.192 | 0.002 | |
| 34 | P-123 | B 29 | B 30 | 12.85 | 32 | 28.2 | PE100, PN10 | 140 | 0.12 | 0.192 | 0.002 | |
| 35 | P-124 | B 30 | STP-50 | 33.4 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |

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| 36 | P-125 | J 50 | J 51 | 126.15 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 37 | P-126 | J 51 | STP-51 | 32.73 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 38 | P-127 | J 51 | B 32 | 33.53 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 39 | P-128 | B 32 | STP-53 | 19.68 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 40 | P-129 | J 51 | B 31 | 30.89 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 41 | P-13 | J 07 | STP-05 | 11.7 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 42 | P-130 | B 31 | STP-52 | 13.36 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 43 | P-14 | J 07 | J 08 | 11.15 | 75 | 66 | PE100, PN10 | 140 | 2.92 | 0.854 | 0.013 | |
| 44 | P-15 | J 08 | STP-06 | 14.68 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 45 | P-16 | J 08 | J 09 | 17.94 | 75 | 66 | PE100, PN10 | 140 | 2.8 | 0.818 | 0.012 | |
| 46 | P-17 | J 09 | STP-07 | 34.88 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 47 | P-18 | J 09 | J 10 | 13.8 | 75 | 66 | PE100, PN10 | 140 | 2.68 | 0.783 | 0.011 | |
| 48 | P-19 | J 10 | STP-08 | 45.97 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 49 | P-20 | J 10 | B 04 | 34.14 | 75 | 66 | PE100, PN10 | 140 | 2.56 | 0.748 | 0.01 | |
| 50 | P-21 | B 04 | J 11 | 17.02 | 75 | 66 | PE100, PN10 | 140 | 2.56 | 0.748 | 0.01 | |
| 51 | P-22 | J 11 | STP-09 | 12.13 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.16 | 0.757 | 0.052 | |
| 52 | P-23 | J 11 | J 12 | 118.63 | 75 | 66 | PE100, PN10 | 140 | 2.4 | 0.702 | 0.009 | |
| 53 | P-24 | J 12 | J 13 | 48.03 | 32 | 28.2 | PE100, PN10 | 140 | 0.72 | 1.153 | 0.061 | |
| 54 | P-25 | J 13 | STP-10 | 9.34 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.16 | 0.757 | 0.052 | |
| 55 | P-26 | J 13 | J 14 | 78.47 | 32 | 28.2 | PE100, PN10 | 140 | 0.56 | 0.897 | 0.038 | |
| 56 | P-27 | J 14 | J 15 | 22.76 | 25 | 21.4 | PE100, PN10 | 140 | 0.28 | 0.778 | 0.04 | |
| 57 | P-28 | J 15 | STP-11 | 10.08 | 25 | 21.4 | PE100, PN10 | 140 | 0.16 | 0.445 | 0.014 | |
| 58 | P-29 | J 15 | STP-12 | 21.84 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 59 | P-30 | J 14 | J 16 | 33.67 | 32 | 28.2 | PE100, PN10 | 140 | 0.28 | 0.448 | 0.011 | |
| 60 | P-31 | J 16 | STP-13 | 13.25 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 61 | P-32 | J 16 | J 16(a) | 8.07 | 25 | 21.4 | PE100, PN10 | 140 | 0.16 | 0.445 | 0.014 | |
| 62 | P-33 | J 16(a) | STP-14 | 22.35 | 25 | 21.4 | PE100, PN10 | 140 | 0.16 | 0.445 | 0.014 | |
| 63 | P-34 | J 12 | J 17 | 14.62 | 63 | 55.4 | PE100, PN10 | 140 | 1.68 | 0.697 | 0.011 | |
| 64 | P-35 | J 17 | STP-15 | 38.79 | 25 | 21.4 | PE100, PN10 | 140 | 0.2 | 0.556 | 0.022 | |
| 65 | P-36 | J 17 | J 18 | 47.08 | 63 | 55.4 | PE100, PN10 | 140 | 1.48 | 0.614 | 0.009 | |
| 66 | P-37 | J 18 | STP-16 | 26 | 25 | 21.4 | PE100, PN10 | 140 | 0.28 | 0.778 | 0.04 | |
| 67 | P-38 | J 18 | J 181 | 107.05 | 50 | 44 | PE100, PN10 | 140 | 1.2 | 0.789 | 0.018 | |
| 68 | P-39 | J 181 | STP-17 | 35.34 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 69 | P-40 | J 181 | J 19 | 29.75 | 50 | 44 | PE100, PN10 | 140 | 1.08 | 0.71 | 0.015 | |
| 70 | P-41 | J 19 | STP-18 | 63.64 | 25 | 21.4 | PE100, PN10 | 140 | 0.2 | 0.556 | 0.022 | |
| 71 | P-42 | J 19 | J 24 | 22.75 | 50 | 44 | PE100, PN10 | 140 | 0.88 | 0.579 | 0.01 | |
| 72 | P-43 | J 24 | STP-24 | 52.19 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 73 | P-44 | J 24 | J 20 | 38.82 | 40 | 35.2 | PE100, PN10 | 140 | 0.76 | 0.781 | 0.023 | |
| 74 | P-45 | J 20 | STP-19 | 13.83 | 25 | 21.4 | PE100, PN10 | 140 | 0.28 | 0.778 | 0.04 | |

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| 75 | P-46 | J 20 | J 21 | 57.9 | 40 | 35.2 | PE100, PN10 | 140 | 0.48 | 0.493 | 0.01 | |
| 76 | P-47 | J 21 | STP-20 | 13.32 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 77 | P-48 | J 21 | B 06 | 64.89 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 78 | P-49 | B 06 | B 07 | 31.87 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 79 | P-50 | B 07 | J 22 | 37.48 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 80 | P-51 | J 22 | STP-21 | 50.56 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 81 | P-52 | J 22 | J 23 | 49.46 | 25 | 21.4 | PE100, PN10 | 140 | 0.24 | 0.667 | 0.03 | |
| 82 | P-53 | J 23 | STP-22 | 32.64 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 83 | P-54 | J 23 | STP-23 | 23.77 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 84 | P-56 | J 25 | STP-25 | 9.71 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.28 | 1.326 | 0.148 | |
| 85 | P-57 | J 25 | J 26 | 43.3 | 75 | 66 | PE100, PN10 | 140 | 4.28 | 1.251 | 0.026 | |
| 86 | P-58 | J 26 | STP-26 | 28.3 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 87 | P-59 | J 26 | J 27 | 33.14 | 75 | 66 | PE100, PN10 | 140 | 4.16 | 1.216 | 0.025 | |
| 88 | P-60 | J 27 | STP-27 | 38.16 | 25 | 21.4 | PE100, PN10 | 140 | 0.2 | 0.556 | 0.022 | |
| 89 | P-61 | J 27 | J 28 | 22.03 | 75 | 66 | PE100, PN10 | 140 | 3.96 | 1.157 | 0.023 | |
| 90 | P-62 | J 28 | B 08 | 7.72 | 40 | 35.2 | PE100, PN10 | 140 | 0.52 | 0.534 | 0.011 | |
| 91 | P-63 | B 08 | J 29 | 24.23 | 32 | 28.2 | PE100, PN10 | 140 | 0.52 | 0.833 | 0.033 | |
| 92 | P-64 | J 29 | STP-28 | 10.75 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 93 | P-65 | J 29 | J 30 | 15.62 | 32 | 28.2 | PE100, PN10 | 140 | 0.4 | 0.64 | 0.02 | |
| 94 | P-66 | J 30 | STP-29 | 10.08 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 95 | P-67 | J 30 | STP-30 | 12.01 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.28 | 1.326 | 0.148 | |
| 96 | P-68 | J 28 | J 50 | 70.53 | 75 | 66 | PE100, PN10 | 140 | 3.44 | 1.005 | 0.017 | |
| 97 | P-69 | J 50 | J 42 | 8.64 | 75 | 66 | PE100, PN10 | 140 | 3.08 | 0.9 | 0.014 | |
| 98 | P-70 | J 42 | J 32 | 24.44 | 63 | 55.4 | PE100, PN10 | 140 | 1.56 | 0.647 | 0.009 | |
| 99 | P-71 | J 32 | STP-31 | 27.39 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 100 | P-72 | J 32 | B 12 | 31.51 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 101 | P-73 | B 12 | J 34 | 14.5 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 102 | P-74 | J 34 | STP-33 | 14.23 | 25 | 21.4 | PE100, PN10 | 140 | 0.24 | 0.667 | 0.03 | |
| 103 | P-75 | J 34 | B 13 | 23.01 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 104 | P-76 | B 13 | STP-32 | 26.94 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 105 | P-77 | J 32 | J 35 | 25.5 | 50 | 44 | PE100, PN10 | 140 | 1.08 | 0.71 | 0.015 | |
| 106 | P-78 | J 35 | STP-34 | 13.02 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.2 | 0.947 | 0.079 | |
| 107 | P-79 | J 35 | B 15 | 17.91 | 40 | 35.2 | PE100, PN10 | 140 | 0.88 | 0.904 | 0.03 | |
| 108 | P-80 | B 15 | J 38 | 11.51 | 50 | 44 | PE100, PN10 | 140 | 0.88 | 0.579 | 0.01 | |
| 109 | P-81 | J 38 | B 151 | 23.74 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 110 | P-82 | B 151 | J 36 | 19.59 | 32 | 28.2 | PE100, PN10 | 140 | 0.36 | 0.576 | 0.017 | |
| 111 | P-83 | J 36 | STP-35 | 32.12 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 112 | P-84 | J 36 | J 37 | 26.45 | 32 | 28.2 | PE100, PN10 | 140 | 0.24 | 0.384 | 0.008 | |
| 113 | P-85 | J 37 | STP-36 | 30.48 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |

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| 114 | P-86 | J 37 | B 17 | 16.17 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 115 | P-87 | B 17 | B 18 | 29.98 | 25 | 21.4 | PE100, PN10 | 140 | 0.12 | 0.334 | 0.008 | |
| 116 | P-88 | B 18 | B 19 | 37.46 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 117 | P-89 | B 19 | STP-37 | 17.61 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 118 | P-90 | J 38 | J 39 | 25.02 | 40 | 35.2 | PE100, PN10 | 140 | 0.52 | 0.534 | 0.011 | |
| 119 | P-91 | J 39 | STP-38 | 21.73 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 120 | P-92 | J 39 | J 40 | 13.43 | 32 | 28.2 | PE100, PN10 | 140 | 0.4 | 0.64 | 0.02 | |
| 121 | P-93 | J 40 | STP-39 | 9.51 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 122 | P-94 | J 40 | J 41 | 13.15 | 32 | 28.2 | PE100, PN10 | 140 | 0.28 | 0.448 | 0.011 | |
| 123 | P-95 | J 41 | STP-40 | 23.87 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.12 | 0.568 | 0.031 | |
| 124 | P-96 | J 41 | B 21 | 12.42 | 32 | 28.2 | PE100, PN10 | 140 | 0.16 | 0.256 | 0.004 | |
| 125 | P-97 | B 21 | B 22 | 36.37 | 25 | 21.4 | PE100, PN10 | 140 | 0.16 | 0.445 | 0.014 | |
| 126 | P-98 | B 22 | B 23 | 25.27 | 25 | 21.4 | PE100, PN10 | 140 | 0.16 | 0.445 | 0.014 | |
| 127 | P-99 | B 23 | STP-41 | 27.4 | 20 | 16.4 | PE100, PN12.7 | 140 | 0.16 | 0.757 | 0.052 | |
| 128 | P-1 | TANK | B 02 | 55 | 90 | 79.2 | PE100, PN10 | 140 | 3.52 | 0.715 | 0.007 | |
| 129 | P-3 | TANK | J-2 | 415.11 | 90 | 79.2 | PE100, PN10 | 140 | 4.56 | 0.926 | 0.012 | |
| 130 | P-4 | J-2 | J-3 | 178.59 | 90 | 79.2 | PE100, PN10 | 140 | 4.56 | 0.926 | 0.012 | |
| 131 | P-5 | J-3 | J 25 | 77.63 | 90 | 79.2 | PE100, PN10 | 140 | 4.56 | 0.926 | 0.012 | |

| Joints Tabel of Hasanzai (Nahr-e-Kariz) village Solar Powered Water Supply Project | | | | | | | | |
|--|---------|--------------|---------------|----------------|-------------------|----------------------|-------------------|---------|
| S #: | Label | Easting (X): | Northing (Y): | Elevation (M): | Demand (lit/sec): | Hydraulic Grade (M): | Pressure (m H2O): | Remarks |
| 1 | B 02 | 717275.62 | 3488565.06 | 912.1 | 0 | 920.69 | 8.57 | |
| 2 | B 04 | 717045.18 | 3488517.57 | 907 | 0 | 918.44 | 11.41 | |
| 3 | B 06 | 716983.11 | 3488065.65 | 902.5 | 0 | 911.53 | 9.01 | |
| 4 | B 07 | 716974.01 | 3488035.72 | 902 | 0 | 911 | 8.98 | |
| 5 | B 08 | 716663.51 | 3488329.2 | 904.3 | 0 | 910.52 | 6.2 | |
| 6 | B 12 | 716628.48 | 3488307.11 | 903 | 0 | 908.49 | 5.48 | |
| 7 | B 13 | 716650.88 | 3488288.17 | 902.4 | 0 | 908.06 | 5.64 | |
| 8 | B 15 | 716594.57 | 3488262.17 | 902.7 | 0 | 908.11 | 5.4 | |
| 9 | B 151 | 716627.19 | 3488250.42 | 902.45 | 0 | 907.6 | 5.14 | |
| 10 | B 17 | 716677.3 | 3488219.86 | 901.6 | 0 | 906.93 | 5.31 | |
| 11 | B 18 | 716706.36 | 3488225.33 | 901.4 | 0 | 906.67 | 5.26 | |
| 12 | B 19 | 716703.87 | 3488187.95 | 901.3 | 0 | 905.52 | 4.21 | |
| 13 | B 21 | 716570 | 3488228.64 | 902 | 0 | 907.26 | 5.25 | |
| 14 | B 21(a) | 717159.64 | 3488462.19 | 911 | 0 | 918.92 | 7.9 | |
| 15 | B 22 | 716561.94 | 3488200.7 | 901.5 | 0 | 906.74 | 5.23 | |
| 16 | B 23 | 716544.1 | 3488191.06 | 901 | 0 | 906.37 | 5.36 | |
| 17 | B 24 | 716455.92 | 3488241.68 | 901.4 | 0 | 907.18 | 5.76 | |
| 18 | B 26 | 716436.89 | 3488191.29 | 901.1 | 0 | 906.57 | 5.46 | |
| 19 | B 27 | 716415.83 | 3488106.14 | 900.3 | 0 | 905.76 | 5.45 | |
| 20 | B 28 | 716448.42 | 3488059.5 | 900.5 | 0 | 905.07 | 4.56 | |
| 21 | B 29 | 716320.77 | 3488076.05 | 900 | 0 | 904.82 | 4.81 | |
| 22 | B 30 | 716313.79 | 3488065.26 | 899.7 | 0 | 904.79 | 5.08 | |
| 23 | B 31 | 716584.15 | 3488453.4 | 902.5 | 0 | 907 | 4.49 | |
| 24 | B 32 | 716635.57 | 3488485.51 | 902.7 | 0 | 906.98 | 4.27 | |
| 25 | B 33 | 716503.6 | 3488284.04 | 902 | 0 | 908.35 | 6.33 | |
| 26 | J 03 | 717145.56 | 3488529.59 | 912 | 0 | 919.67 | 7.66 | |
| 27 | J 04 | 717150.38 | 3488507.64 | 911.5 | 0 | 919.3 | 7.78 | |
| 28 | J 05 | 717154.43 | 3488482.23 | 910.7 | 0 | 919.09 | 8.37 | |
| 29 | J 06 | 717132.81 | 3488521.53 | 910.1 | 0 | 919.45 | 9.33 | |
| 30 | J 07 | 717121.86 | 3488518.38 | 909.1 | 0 | 919.29 | 10.17 | |
| 31 | J 08 | 717110.73 | 3488517.62 | 908 | 0 | 919.15 | 11.12 | |

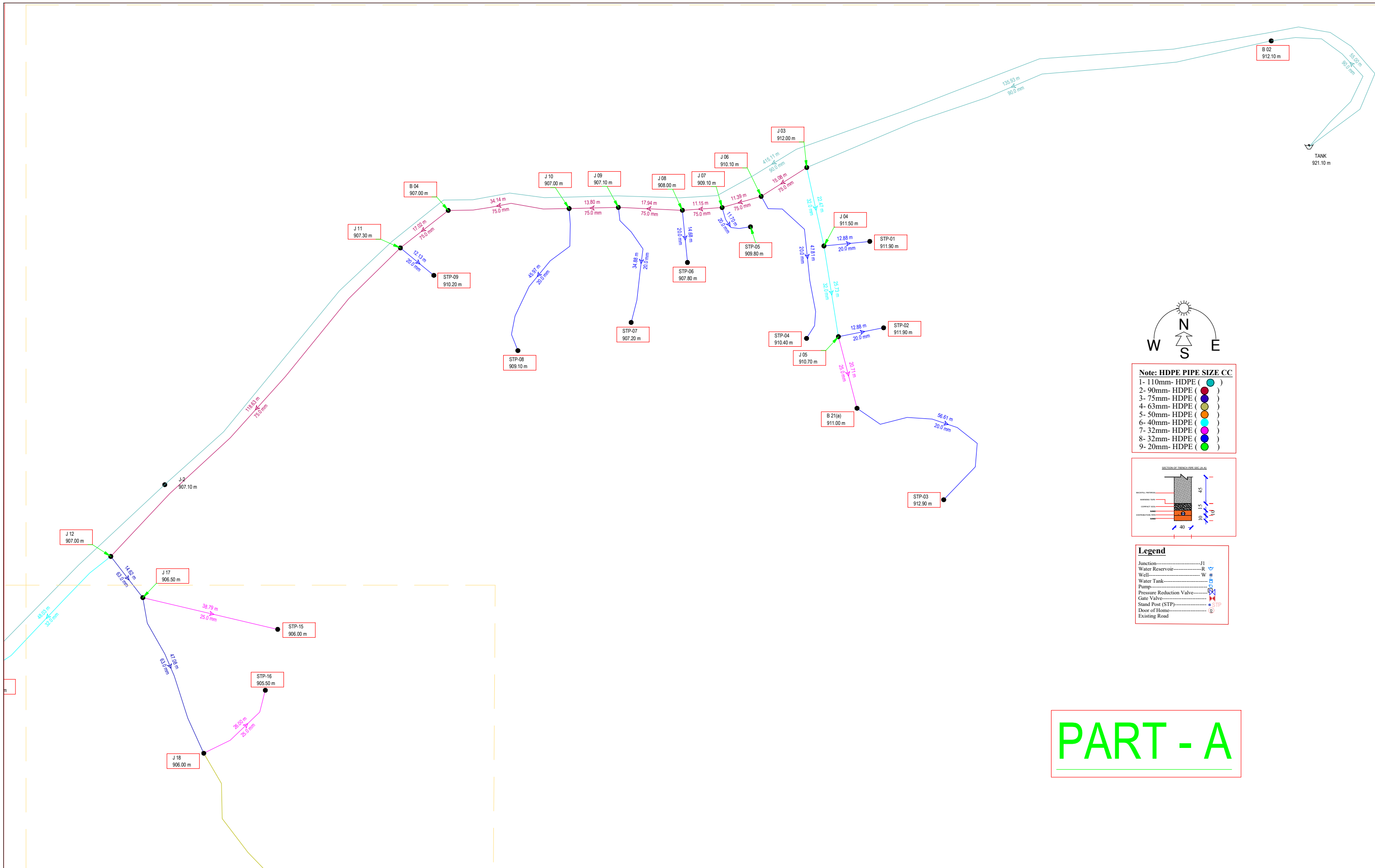
| | | | | | | | | |
|----|---------|-----------|------------|-------|---|--------|-------|--|
| 32 | J 09 | 717092.81 | 3488518.44 | 907.1 | 0 | 918.93 | 11.81 | |
| 33 | J 10 | 717079.02 | 3488518.11 | 907 | 0 | 918.78 | 11.76 | |
| 34 | J 11 | 717031.77 | 3488507.09 | 907.3 | 0 | 918.27 | 10.94 | |
| 35 | J 12 | 716950.67 | 3488420.72 | 907 | 0 | 917.2 | 10.18 | |
| 36 | J 13 | 716915.53 | 3488388.28 | 906.5 | 0 | 914.3 | 7.78 | |
| 37 | J 14 | 716854.67 | 3488361.58 | 906 | 0 | 911.31 | 5.3 | |
| 38 | J 15 | 716869.43 | 3488344.96 | 905 | 0 | 910.4 | 5.38 | |
| 39 | J 16 | 716827.35 | 3488351.48 | 905.5 | 0 | 910.96 | 5.45 | |
| 40 | J 16(a) | 716824.88 | 3488343.8 | 905.5 | 0 | 910.84 | 5.33 | |
| 41 | J 17 | 716959.64 | 3488409.17 | 906.5 | 0 | 917.05 | 10.52 | |
| 42 | J 18 | 716976.71 | 3488365.61 | 906 | 0 | 916.64 | 10.62 | |
| 43 | J 181 | 716993.81 | 3488269.19 | 905 | 0 | 914.73 | 9.71 | |
| 44 | J 19 | 716988.63 | 3488239.9 | 905 | 0 | 914.29 | 9.28 | |
| 45 | J 20 | 716982.61 | 3488179.96 | 904 | 0 | 913.18 | 9.16 | |
| 46 | J 21 | 716977.34 | 3488123.74 | 903.6 | 0 | 912.62 | 9 | |
| 47 | J 22 | 716962.93 | 3488001.62 | 902 | 0 | 910.37 | 8.35 | |
| 48 | J 23 | 716924.25 | 3487977.1 | 902 | 0 | 908.87 | 6.86 | |
| 49 | J 24 | 716985.24 | 3488217.4 | 904.5 | 0 | 914.07 | 9.55 | |
| 50 | J 25 | 716764.34 | 3488335.73 | 905 | 0 | 913.05 | 8.04 | |
| 51 | J 26 | 716721.1 | 3488337.81 | 905 | 0 | 911.92 | 6.91 | |
| 52 | J 27 | 716687.96 | 3488338.7 | 904.7 | 0 | 911.1 | 6.39 | |
| 53 | J 28 | 716666.05 | 3488336.49 | 904.4 | 0 | 910.6 | 6.19 | |
| 54 | J 29 | 716639.32 | 3488330.56 | 904 | 0 | 909.71 | 5.7 | |
| 55 | J 30 | 716623.73 | 3488329.54 | 903.5 | 0 | 909.4 | 5.88 | |
| 56 | J 31 | 716581.63 | 3488330.72 | 903.3 | 0 | 909.09 | 5.78 | |
| 57 | J 32 | 716597.2 | 3488305.47 | 903.2 | 0 | 909.02 | 5.81 | |
| 58 | J 34 | 716628.5 | 3488292.61 | 902.7 | 0 | 908.25 | 5.54 | |
| 59 | J 35 | 716594.91 | 3488280.08 | 903 | 0 | 908.65 | 5.64 | |
| 60 | J 36 | 716637.9 | 3488234.36 | 902 | 0 | 907.27 | 5.26 | |
| 61 | J 37 | 716661.5 | 3488223.31 | 901.8 | 0 | 907.06 | 5.25 | |
| 62 | J 38 | 716605.88 | 3488260.06 | 902.7 | 0 | 908 | 5.29 | |
| 63 | J 39 | 716601.74 | 3488235.38 | 902.4 | 0 | 907.72 | 5.3 | |
| 64 | J 40 | 716595.5 | 3488227 | 902.3 | 0 | 907.44 | 5.13 | |
| 65 | J 41 | 716582.42 | 3488228.33 | 902 | 0 | 907.3 | 5.29 | |

| | | | | | | | | |
|----|--------|-----------|------------|-------|------|--------|-------|--|
| 66 | J 42 | 716599.39 | 3488329.82 | 903.4 | 0 | 909.25 | 5.84 | |
| 67 | J 43 | 716563.06 | 3488326.02 | 903 | 0 | 908.92 | 5.91 | |
| 68 | J 44 | 716480.88 | 3488265.53 | 901.7 | 0 | 907.65 | 5.94 | |
| 69 | J 45 | 716471.7 | 3488257.85 | 901.5 | 0 | 907.46 | 5.95 | |
| 70 | J 46 | 716445.19 | 3488227.34 | 901.3 | 0 | 906.95 | 5.64 | |
| 71 | J 47 | 716425.51 | 3488139.49 | 901 | 0 | 906.02 | 5.01 | |
| 72 | J 48 | 716398.92 | 3488076.92 | 900.5 | 0 | 905.5 | 4.99 | |
| 73 | J 49 | 716343.11 | 3488076.16 | 900.5 | 0 | 904.87 | 4.36 | |
| 74 | J 49A | 716330.96 | 3488075.13 | 900 | 0 | 904.84 | 4.83 | |
| 75 | J 50 | 716599.61 | 3488338.46 | 903.5 | 0 | 909.37 | 5.86 | |
| 76 | J 51 | 716613.37 | 3488463.44 | 903 | 0 | 907.26 | 4.25 | |
| 77 | STP-01 | 717163.2 | 3488508.91 | 911.9 | 0.12 | 918.9 | 6.98 | |
| 78 | STP-02 | 717167.07 | 3488484.72 | 911.9 | 0.12 | 918.7 | 6.78 | |
| 79 | STP-03 | 717183.91 | 3488436.6 | 912.9 | 0.12 | 917.18 | 4.27 | |
| 80 | STP-04 | 717145.5 | 3488481.76 | 910.4 | 0.12 | 917.98 | 7.56 | |
| 81 | STP-05 | 717129.8 | 3488513.01 | 909.8 | 0.12 | 918.93 | 9.11 | |
| 82 | STP-06 | 717112.15 | 3488503.01 | 907.8 | 0.12 | 918.69 | 10.87 | |
| 83 | STP-07 | 717096.39 | 3488486.22 | 907.2 | 0.12 | 917.86 | 10.64 | |
| 84 | STP-08 | 717064.66 | 3488478.34 | 909.1 | 0.12 | 917.37 | 8.25 | |
| 85 | STP-09 | 717041.14 | 3488499.39 | 910.2 | 0.16 | 917.63 | 7.42 | |
| 86 | STP-10 | 716912.78 | 3488397.21 | 906.4 | 0.16 | 913.81 | 7.39 | |
| 87 | STP-11 | 716866.23 | 3488335.81 | 904.7 | 0.16 | 910.25 | 5.54 | |
| 88 | STP-12 | 716880.18 | 3488326.83 | 904.5 | 0.12 | 909.72 | 5.21 | |
| 89 | STP-13 | 716814.82 | 3488347.19 | 905.2 | 0.12 | 910.55 | 5.34 | |
| 90 | STP-14 | 716835.27 | 3488325.71 | 905 | 0.16 | 910.52 | 5.51 | |
| 91 | STP-15 | 716997.4 | 3488400.29 | 906 | 0.2 | 916.21 | 10.19 | |
| 92 | STP-16 | 716993.95 | 3488383.24 | 905.5 | 0.28 | 915.59 | 10.07 | |
| 93 | STP-17 | 717020.07 | 3488284.03 | 904.5 | 0.12 | 913.64 | 9.13 | |
| 94 | STP-18 | 717035.28 | 3488213.4 | 904 | 0.2 | 912.92 | 8.9 | |
| 95 | STP-19 | 716969.06 | 3488182.67 | 904 | 0.28 | 912.62 | 8.61 | |
| 96 | STP-20 | 716990.53 | 3488121.93 | 903.3 | 0.12 | 912.21 | 8.89 | |
| 97 | STP-21 | 716966.29 | 3487957.84 | 902.1 | 0.12 | 908.82 | 6.7 | |
| 98 | STP-22 | 716899.71 | 3487964.27 | 902 | 0.12 | 907.87 | 5.85 | |
| 99 | STP-23 | 716932.02 | 3487964.48 | 902 | 0.12 | 908.14 | 6.13 | |

| | | | | | | | | |
|-----|--------|-----------|------------|--------|------|--------|------|--|
| 100 | STP-24 | 716937.14 | 3488229.67 | 905 | 0.12 | 912.46 | 7.45 | |
| 101 | STP-25 | 716764.14 | 3488345.44 | 905 | 0.28 | 911.62 | 6.61 | |
| 102 | STP-26 | 716719.37 | 3488309.56 | 904.75 | 0.12 | 911.05 | 6.29 | |
| 103 | STP-27 | 716695.15 | 3488307.16 | 904.3 | 0.2 | 910.28 | 5.96 | |
| 104 | STP-28 | 716638.04 | 3488319.88 | 903.7 | 0.12 | 909.38 | 5.67 | |
| 105 | STP-29 | 716622.92 | 3488319.49 | 903 | 0.12 | 909.09 | 6.07 | |
| 106 | STP-30 | 716612.78 | 3488324.61 | 903 | 0.28 | 907.62 | 4.61 | |
| 107 | STP-31 | 716569.82 | 3488306.26 | 903 | 0.12 | 908.18 | 5.17 | |
| 108 | STP-32 | 716661.67 | 3488269.99 | 902 | 0.12 | 907.23 | 5.22 | |
| 109 | STP-33 | 716623.51 | 3488279.29 | 902.4 | 0.24 | 907.82 | 5.41 | |
| 110 | STP-34 | 716607.91 | 3488280.84 | 902.5 | 0.2 | 907.62 | 5.11 | |
| 111 | STP-35 | 716646.1 | 3488265.42 | 901.8 | 0.12 | 906.28 | 4.47 | |
| 112 | STP-36 | 716676.1 | 3488248.78 | 901.5 | 0.12 | 906.12 | 4.62 | |
| 113 | STP-37 | 716720.23 | 3488181.45 | 901 | 0.12 | 904.98 | 3.97 | |
| 114 | STP-38 | 716616.21 | 3488239.84 | 902 | 0.12 | 907.05 | 5.04 | |
| 115 | STP-39 | 716594.72 | 3488236.48 | 902.2 | 0.12 | 907.15 | 4.94 | |
| 116 | STP-40 | 716573.41 | 3488244.03 | 901.5 | 0.12 | 906.57 | 5.06 | |
| 117 | STP-41 | 716519.21 | 3488182.76 | 901 | 0.16 | 904.94 | 3.93 | |
| 118 | STP-42 | 716547.97 | 3488276.2 | 902.3 | 0.12 | 907.11 | 4.8 | |
| 119 | STP-43 | 716441.91 | 3488281.1 | 901.6 | 0.28 | 905.96 | 4.35 | |
| 120 | STP-44 | 716487.2 | 3488260.38 | 901 | 0.12 | 906.91 | 5.9 | |
| 121 | STP-45 | 716474.64 | 3488225.85 | 901 | 0.12 | 906.04 | 5.03 | |
| 122 | STP-46 | 716440.12 | 3488139.34 | 900.5 | 0.12 | 905.58 | 5.06 | |
| 123 | STP-47 | 716475.11 | 3488032.06 | 900.5 | 0.24 | 903.54 | 3.04 | |
| 124 | STP-48 | 716342.98 | 3488083.75 | 900.5 | 0.28 | 903.75 | 3.25 | |
| 125 | STP-49 | 716328.48 | 3488084.97 | 900 | 0.12 | 904.44 | 4.43 | |
| 126 | STP-50 | 716280.58 | 3488068.77 | 900 | 0.12 | 903.76 | 3.75 | |
| 127 | STP-51 | 716607.11 | 3488495.57 | 902 | 0.12 | 906.25 | 4.24 | |
| 128 | STP-52 | 716575.6 | 3488463.67 | 902 | 0.12 | 906.59 | 4.58 | |
| 129 | STP-53 | 716635.13 | 3488504.79 | 902.2 | 0.12 | 906.37 | 4.16 | |
| 130 | J-2 | 716965.79 | 3488440.8 | 907.1 | 0 | 916.13 | 9.01 | |
| 131 | J-3 | 716828.23 | 3488362.03 | 905.3 | 0 | 913.99 | 8.68 | |



| | | | | | | | | | | | |
|---|-------------|-----------------------|-------------|-----------------------|-------------|-----------|---|----------|--------------------------|---|---|
| <div><div>MEDAIR</div><div>AFGHANISTAN MEDAIR WASH Development</div><div>WASH</div></div> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO. <div><div>X</div><div>X</div></div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | SITE PLAN | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Outer Dia & Length in Network while Label & Elevation in Junction | |



Note: HDPE PIPE SIZE CC

| |
|--------------------|
| 1- 110mm- HDPE () |
| 2- 90mm- HDPE () |
| 3- 75mm- HDPE () |
| 4- 63mm- HDPE () |
| 5- 50mm- HDPE () |
| 6- 40mm- HDPE () |
| 7- 32mm- HDPE () |
| 8- 32mm- HDPE () |
| 9- 20mm- HDPE () |

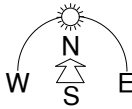
SECTION OF TRENCH PIPE SET (A-A)

Legend

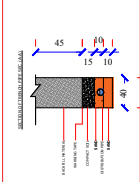
| | |
|--------------------------|----------|
| Junction | -----J1 |
| Water Reservoir | -----R |
| Well | -----W |
| Water Tank | -----T |
| Pump | -----P |
| Pressure Reduction Valve | -----PRV |
| Gate Valve | -----GV |
| Stand Post (STP) | -----STP |
| Door of Home | -----D |
| Existing Road | -----R |

PART - A

| | | | | | | | | | | |
|--|-------------|-----------------------|-------------|-----------------------|-------------|----------|-----------|----------|--------------------------|--|
| AFGHANISTAN MEDAIR WASH Development <i>WASH</i> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO. | PROVINCE | Kandahar | PROJECT NAME Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | PART - A | | VILLAGE | Hassanzai (Nahr-e-Kariz) | DRAWING TITLE Outer Dia & Length in Network while Label & Elevation in Junction |

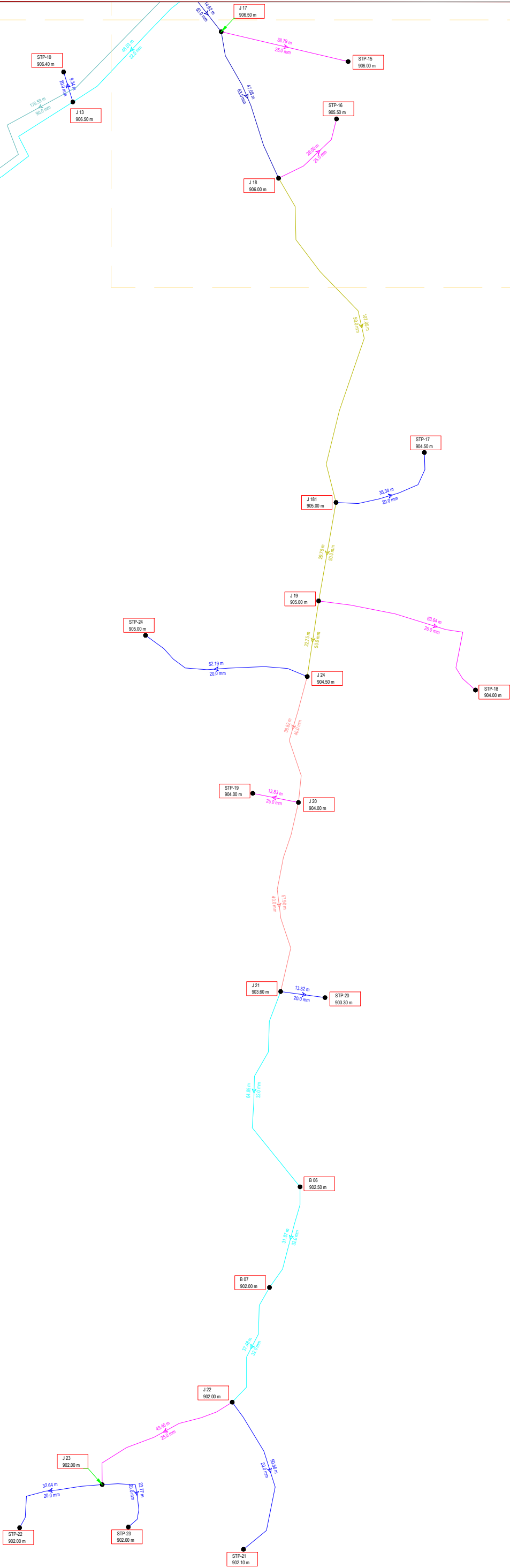





| Note: HDPE PIPE SIZE (CC) | |
|---------------------------|--|
| 1- 110mm- HDPE () | |
| 2- 90mm- HDPE () | |
| 3- 75mm- HDPE () | |
| 4- 63mm- HDPE () | |
| 5- 50mm- HDPE () | |
| 6- 40mm- HDPE () | |
| 7- 32mm- HDPE () | |
| 8- 25mm- HDPE () | |
| 9- 20mm- HDPE () | |

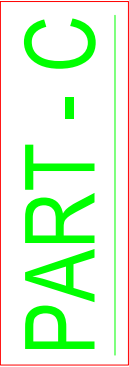





| Legend | |
|--------------------------|-----|
| Junction | J |
| Water Reservoir | W |
| Water Tank | W |
| Pressure Reduction Valve | PRV |
| Start Point (STP) | STP |
| End of Pipe | EOP |
| Existing Road | R |


PART - B

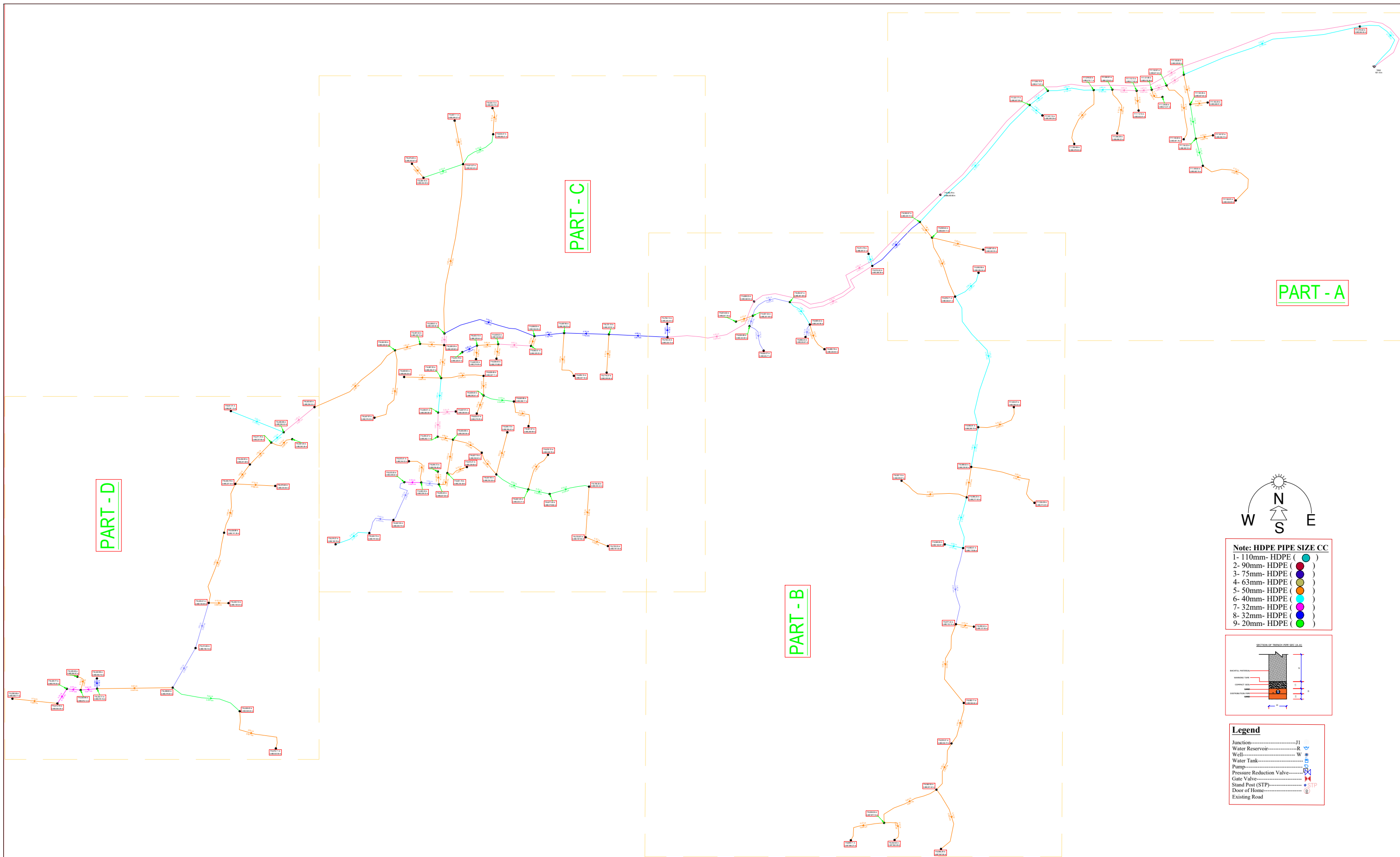


| | | | | | | | | | | | | |
|---|-------------|-----------------------|-------------|-----------------------|------------|----------|--|----------|--------------------------|---------------|--|---|
|  AFGHANISTAN MEDAIR WASH Development  | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | I : XX |  SHEET NO. | PROVINCE | Kandahar | PROJECT NAME | | Hassanzai (Nahr-e-Kariz) Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | | Outer Dia & Length in Network while Label & Elevation in Junction |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO | PART - B | | VILLAGE | Hassanzai (Nahr-e-Kariz) | | | |



| | | | | | | | | | | | |
|--|-----------------------|-------------|-----------------------|------------|---------------------|-----------|----------|---|--------------------------|----------|--|
| <div><div><div>AFGHANISTAN MEDAIR WASH Development</div></div><div><div>WASH</div></div></div> | | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:XX |  | PROVINCE | Kandahar | PROJECT NAME Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | SHEET NO. | DISTRICT | | ZHIRAI | | |
| DRAWN BY | KHR - WASH Department | APPROVED BY | Commer Wingerter | DRAWING NO | PART - C | | VILLAGE | | Hassanzai (Nahr-e-Kariz) | | |
| Outer Dia & Length in Network while Label & Elevation in Junction | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|--|-----------------------|-------------|-----------------------|-------------|-----------------------|------------|---------------------|---------------|--------------------------|---|----------|----------|--------------|--|
| <div><div>MEDAIR</div><div>AFGHANISTAN MEDAIR WASH Development</div><div></div></div> | | | | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | <div><div><div><div>X</div><div>X</div></div></div><div>SHEET NO.</div></div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | DISTRICT | ZHIRAI | DRAWING TITLE | | | | | | |
| DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO | PART - D | | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Outer Dia & Length in Network while Label & Elevation in Junction | | | | |



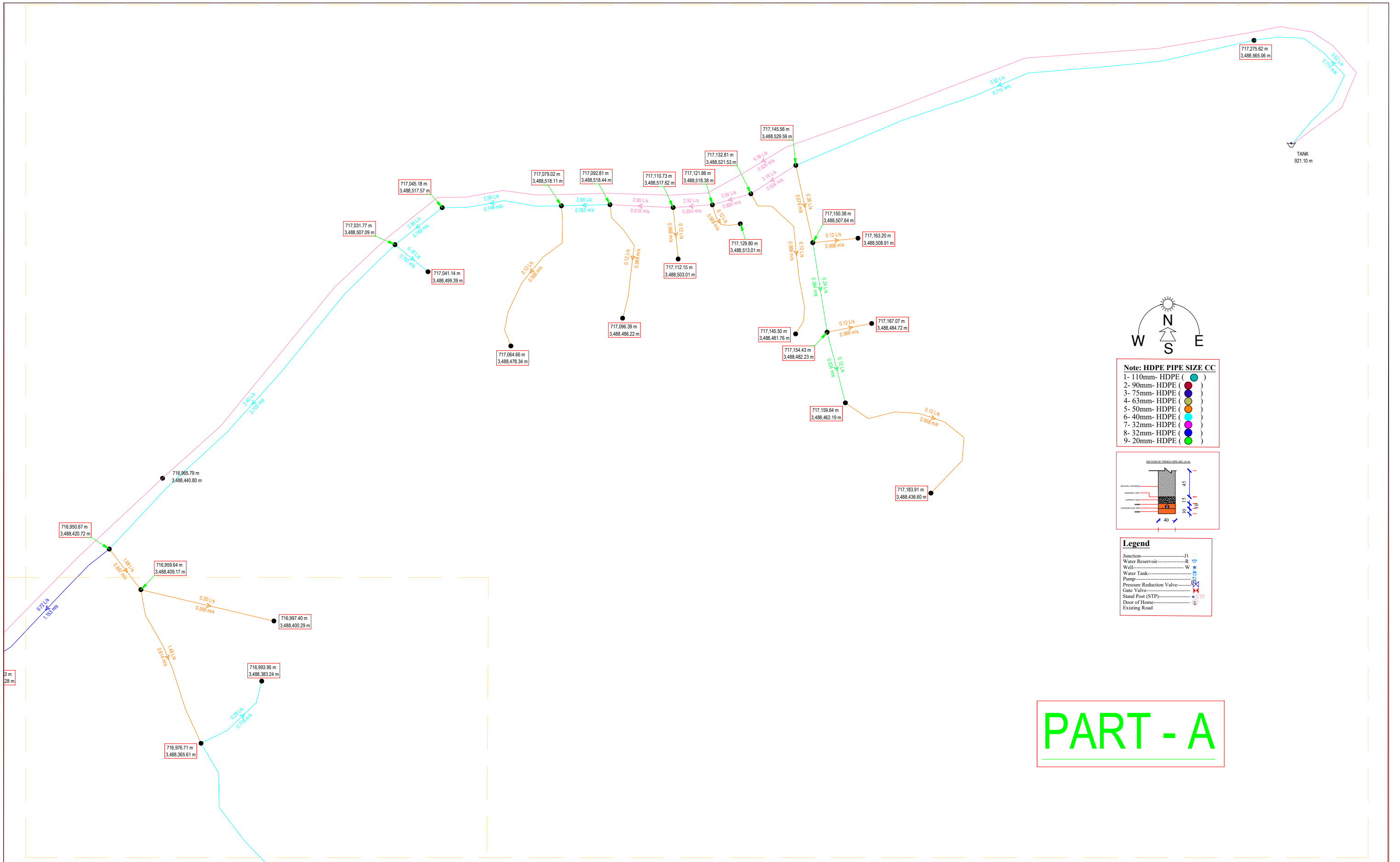
Note: HDPE PIPE SIZE CC

| |
|--------------------|
| 1- 110mm- HDPE () |
| 2- 90mm- HDPE () |
| 3- 75mm- HDPE () |
| 4- 63mm- HDPE () |
| 5- 50mm- HDPE () |
| 6- 40mm- HDPE () |
| 7- 32mm- HDPE () |
| 8- 32mm- HDPE () |
| 9- 20mm- HDPE () |


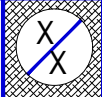
Legend

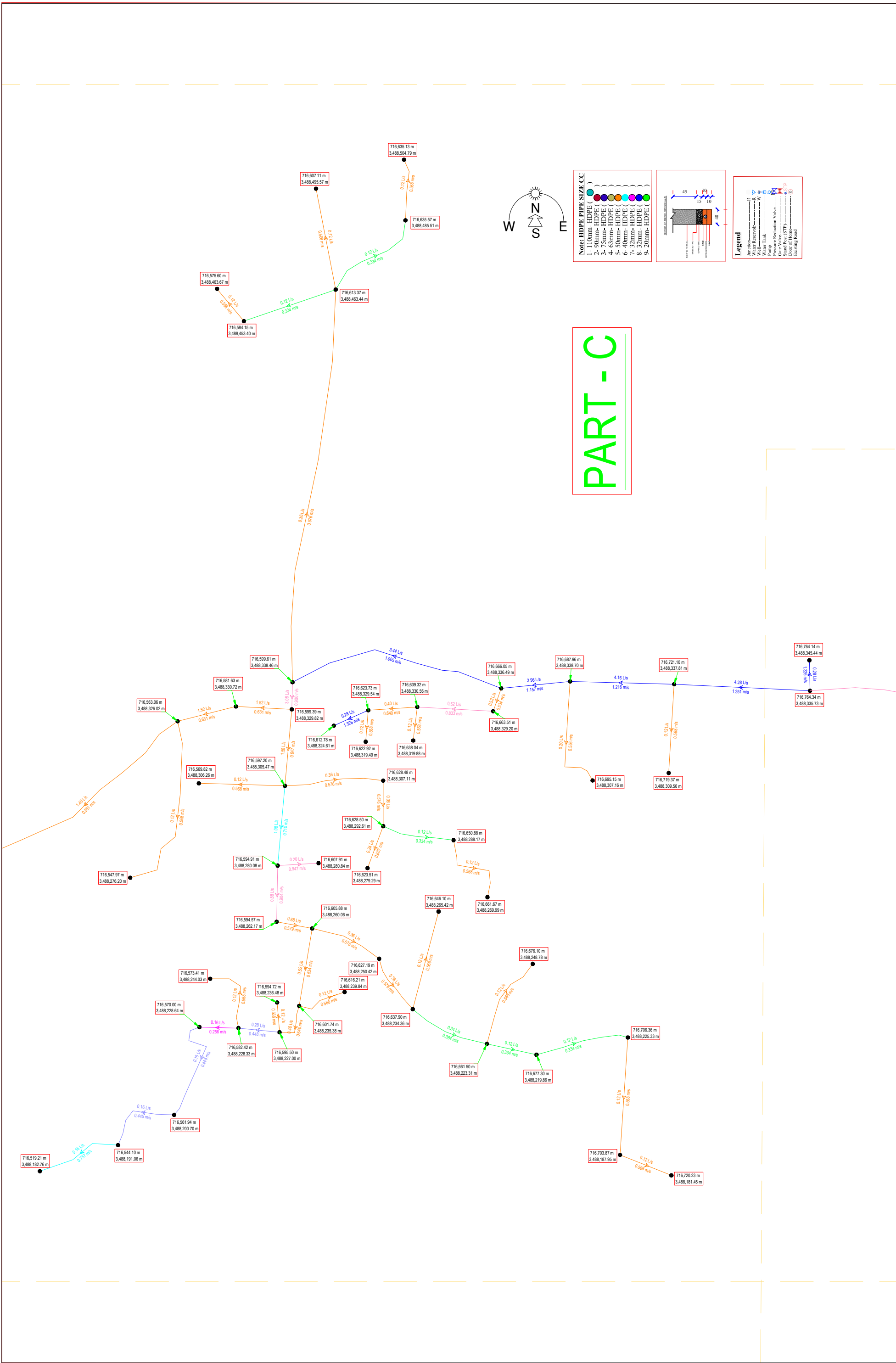
| | |
|--------------------------|----------|
| Junction | -----J1 |
| Water Reservoir | -----R |
| Water Tank | -----W |
| Pump | -----P |
| Pressure Reduction Valve | -----PRV |
| Gate Valve | -----GV |
| Stand Post (STP) | -----STP |
| Door of Home | -----DH |
| Existing Road | ----- |

| | | | | | | | | | | | |
|---|-------------|-----------------------|-------------|-----------------------|-------------|-----------|-----------------------|----------|--------------------------|--|---|
| <div><div>MEDAIR</div><div>AFGHANISTAN MEDAIR WASH Development</div><div>WASH</div></div> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO. <div></div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | SITE PLAN | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Flow & Velocity in Network while Coordinates in Junction | |



PART - A

| | | | | | | | | | | |
|--|-------------|-----------------------|-------------|-----------------------|-------------|----------|---|----------|--------------------------|--|
|  AFGHANISTAN MEDAIR WASH Development <i>WASH</i> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO.  | PROVINCE | Kandahar | PROJECT NAME Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | PART - A | | VILLAGE | Hassanzai (Nahr-e-Kariz) | DRAWING TITLE Flow & Velocity in Network while Coordinates in Junction |



PART - C

Note: HDPE PIPE SIZE CC

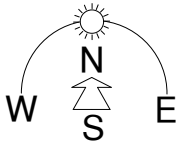
- 1- 10mm- HDPE ()
- 2- 20mm- HDPE ()
- 3- 25mm- HDPE ()
- 4- 63mm- HDPE ()
- 5- 50mm- HDPE ()
- 6- 40mm- HDPE ()
- 7- 32mm- HDPE ()
- 8- 32mm- HDPE ()
- 9- 20mm- HDPE ()

Legend

- Water Reservoir
- Water Tank
- Water Valve
- Pressure Reducing Valve
- Gate Valve
- Check Valve
- Existing Road

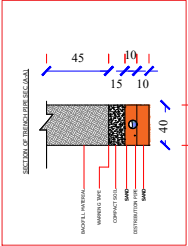
| | | | | | | | | | | | |
|---|-------------|-----------------------|-------------|-----------------------|------------|--------|---------------------------|----------|--------------------------|--|---|
| AFGHANISTAN MEDAIR WASH Development WASH MEDAIR PROGRESS THROUGH WATER | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | I : XX | SHEET 'ON' PART - C | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Comner Wingerter | DRAWING NO | | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Flow & Velocity in Network while Coordinates in Junction | |

PART - D



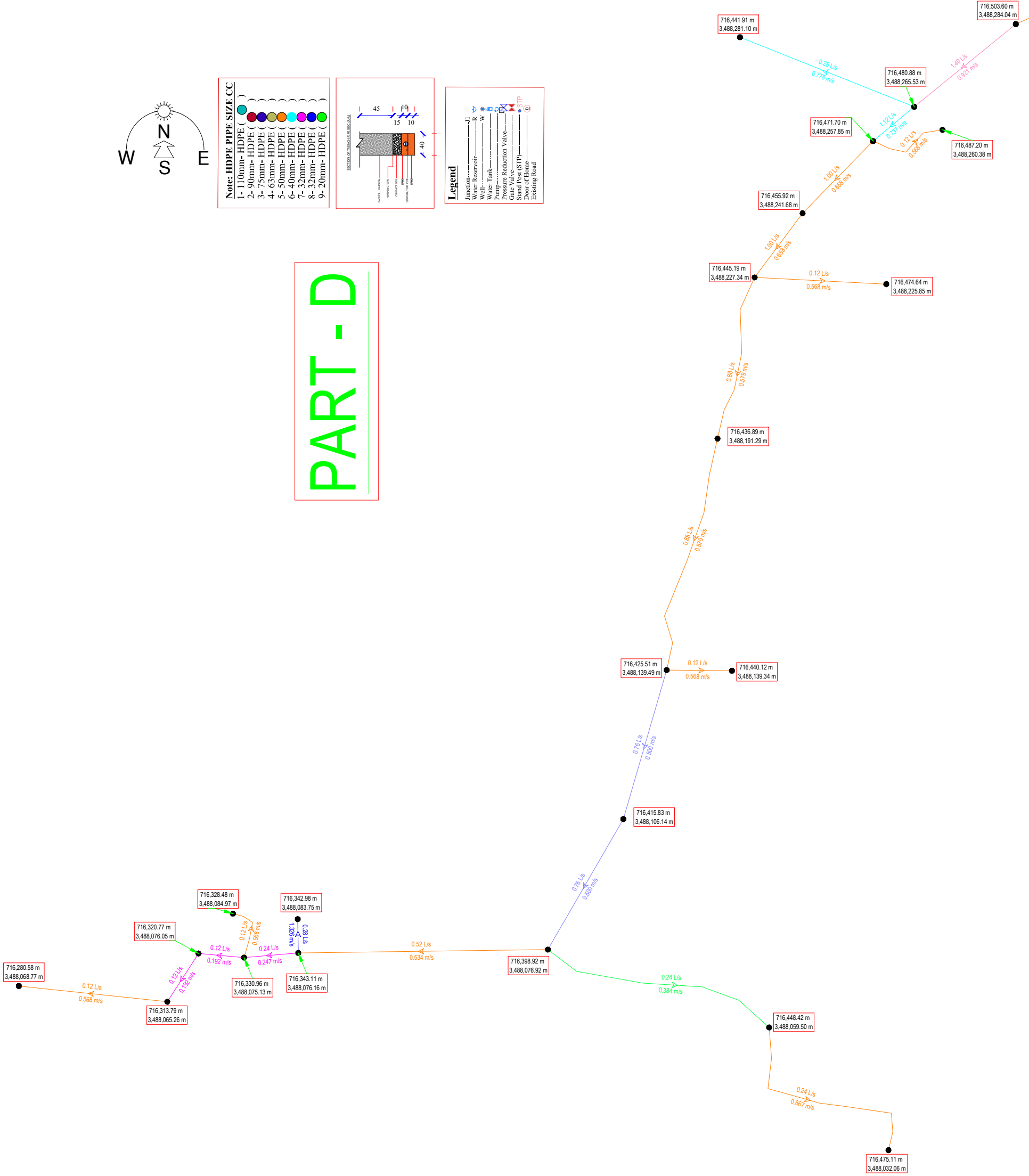
Note: HDPE PIPE SIZE CC

| |
|--------------------|
| 1- 110mm- HDPE () |
| 2- 90mm- HDPE () |
| 3- 75mm- HDPE () |
| 4- 63mm- HDPE () |
| 5- 50mm- HDPE () |
| 6- 40mm- HDPE () |
| 7- 32mm- HDPE () |
| 8- 25mm- HDPE () |
| 9- 20mm- HDPE () |

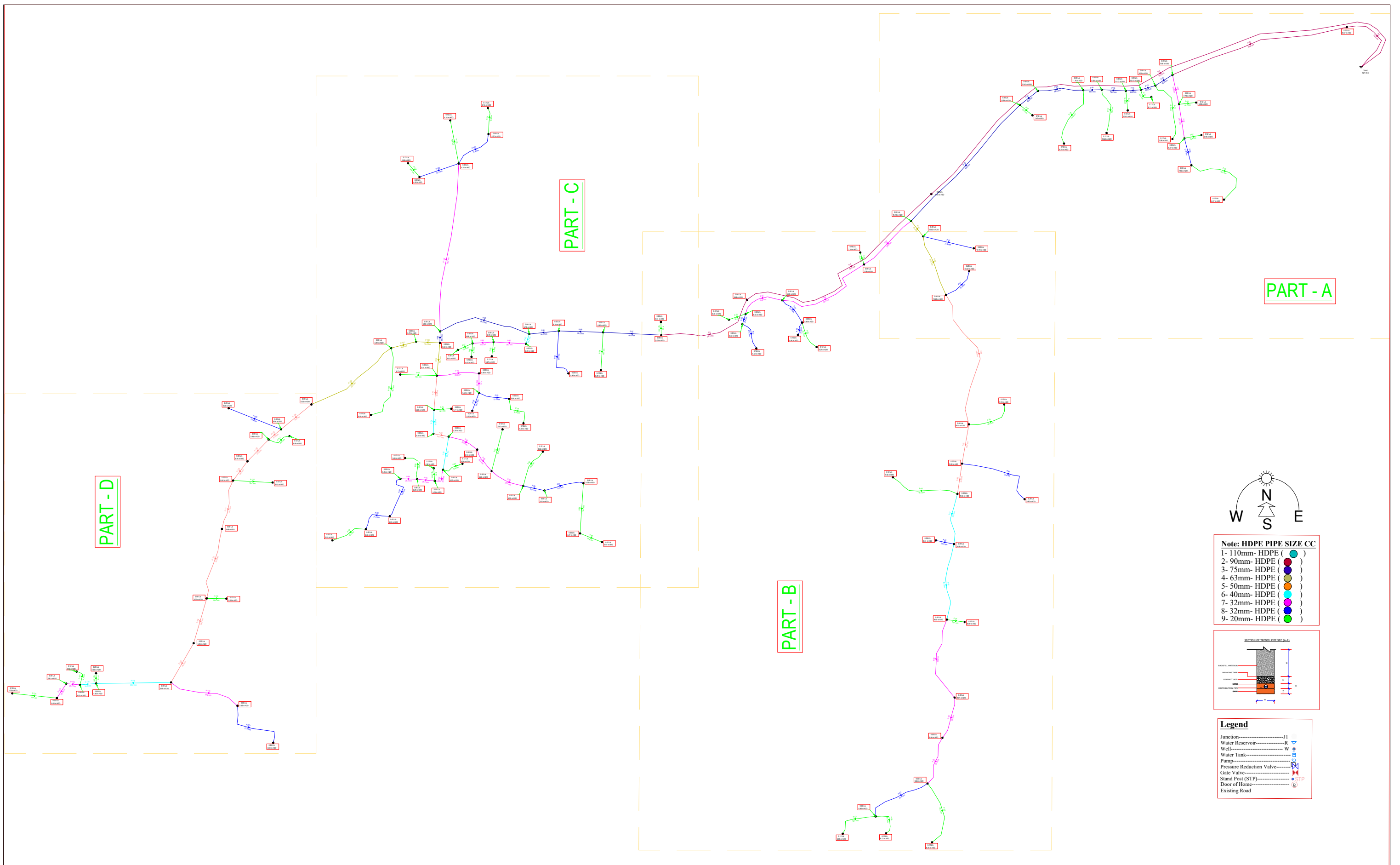



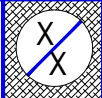
Legend

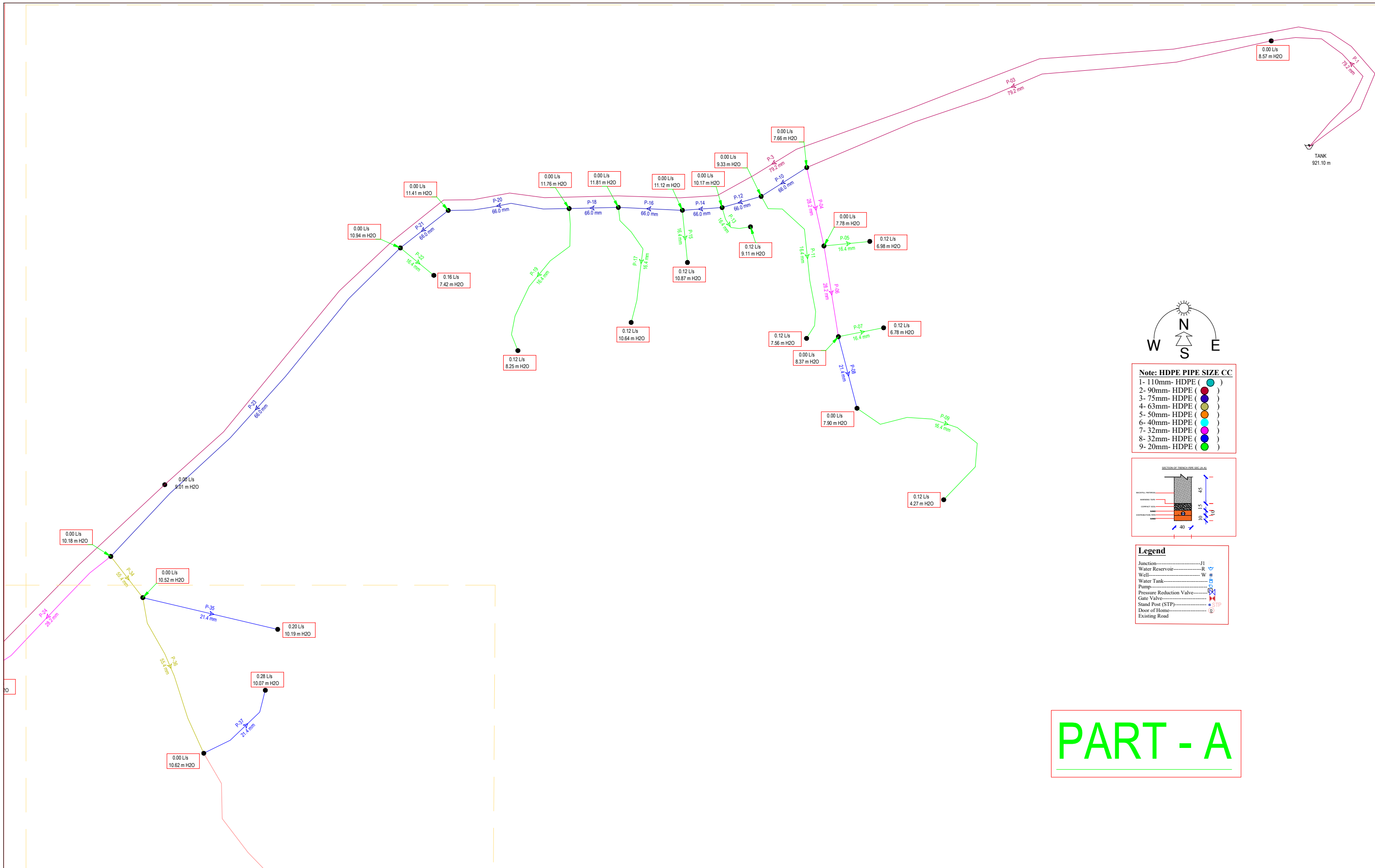
| | |
|--------------------------|-----|
| Junction | J |
| Water Reservoir | R |
| Water Tank | W |
| Pump | P |
| Pressure Reduction Valve | PRV |
| Gate Valve | GV |
| Sand Pit (SP) | SP |
| Existing Road | ER |



| | | | | | | | | | | | |
|--|-------------|-----------------------|-------------|-----------------------|------------|--------|-------------------------------------|----------|--------------------------|--|--|
| <div>MEDAIR</div> <div>AFGHANISTAN MEDAIR WASH Development</div> <div>WASH</div> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1 : XX | <div><div>X</div><div>X</div></div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO | | PART - D | VILLAGE | Hassanzai (Nahr-e-Kariz) | Flow & Velocity in Network while Coordinates in Junction | |
| | | | | | | | | | | | |



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|--|-------------|-----------------------|-------------|-----------------------|-------------|-----------|---|----------|--------------------------|--|---|
|  AFGHANISTAN MEDAIR WASH Development <i>WASH</i> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO.  | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | SITE PLAN | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Label & Inner Dia in Network while Demand & Pressure in Junction | |



N

W

S

E

Note: HDPE PIPE SIZE CC

| |
|--------------------|
| 1- 110mm- HDPE () |
| 2- 90mm- HDPE () |
| 3- 75mm- HDPE () |
| 4- 63mm- HDPE () |
| 5- 50mm- HDPE () |
| 6- 40mm- HDPE () |
| 7- 32mm- HDPE () |
| 8- 32mm- HDPE () |
| 9- 20mm- HDPE () |

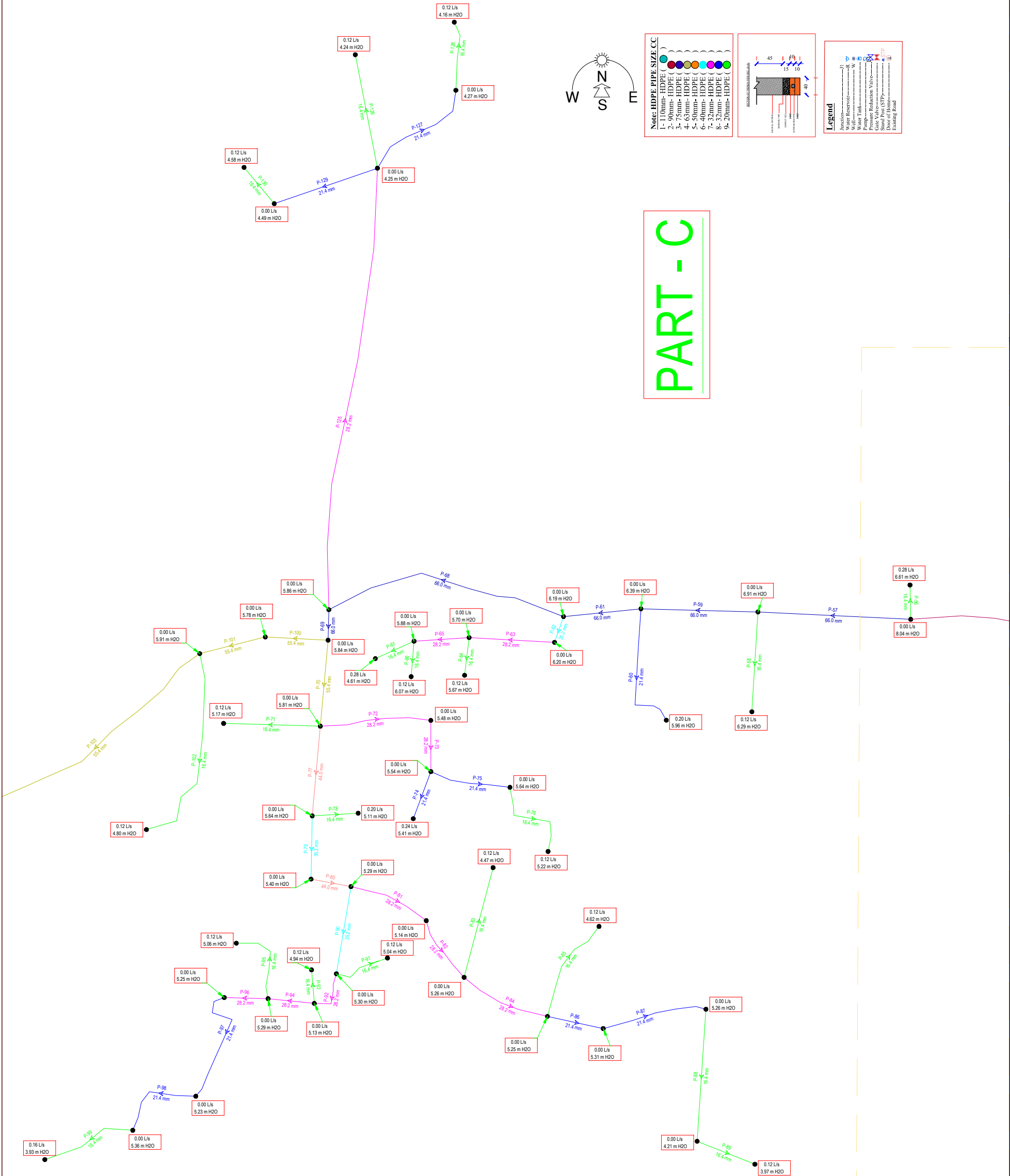
SECTION OF TRENCH PIPE SIZE 40

Legend

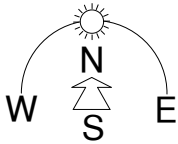
| | |
|--------------------------|----------|
| Junction | -----J1 |
| Water Reservoir | -----R |
| Well | -----W |
| Water Tank | -----T |
| Pump | -----P |
| Pressure Reduction Valve | -----PRV |
| Gate Valve | -----GV |
| Stand Post (STP) | -----STP |
| Door of Home | -----D |
| Existing Road | -----R |

PART - A

| | | | | | | | | | | | |
|---|-------------|-----------------------|-------------|-----------------------|-------------|----------|-----------------------|----------|--------------------------|--|---|
| <div><div>MEDAIR</div><div>AFGHANISTAN MEDAIR WASH Development</div><div>WASH</div></div> | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1:xx | SHEET NO. <div></div> | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | DRAWING TITLE | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO. | PART - A | | VILLAGE | Hassanzai (Nahr-e-Kariz) | Label & Inner Dia in Network while Demand & Pressure in Junction | |

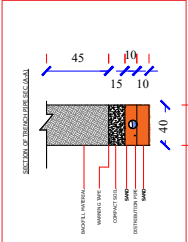


| | | | | | | | | | | | |
|--|-------------|-----------------------|-------------|-----------------------|------------|-------|---------------------------------|----------|--------------------------|---------------|--|
| AFGHANISTAN MEDAIR WASH Development WASH MEDAIR IMPROVING RURAL MEDICAL | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | I :XX | SHEET NO. PART - C | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Water Supply Network |
| | DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | | DISTRICT | ZHIRAI | | |
| | DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO | | | VILLAGE | Hassanzai (Nahr-e-Kariz) | DRAWING TITLE | Label & Inner Dia in Network while Demand & Pressure in Junction |



Note: HDPE PIPE SIZE CC

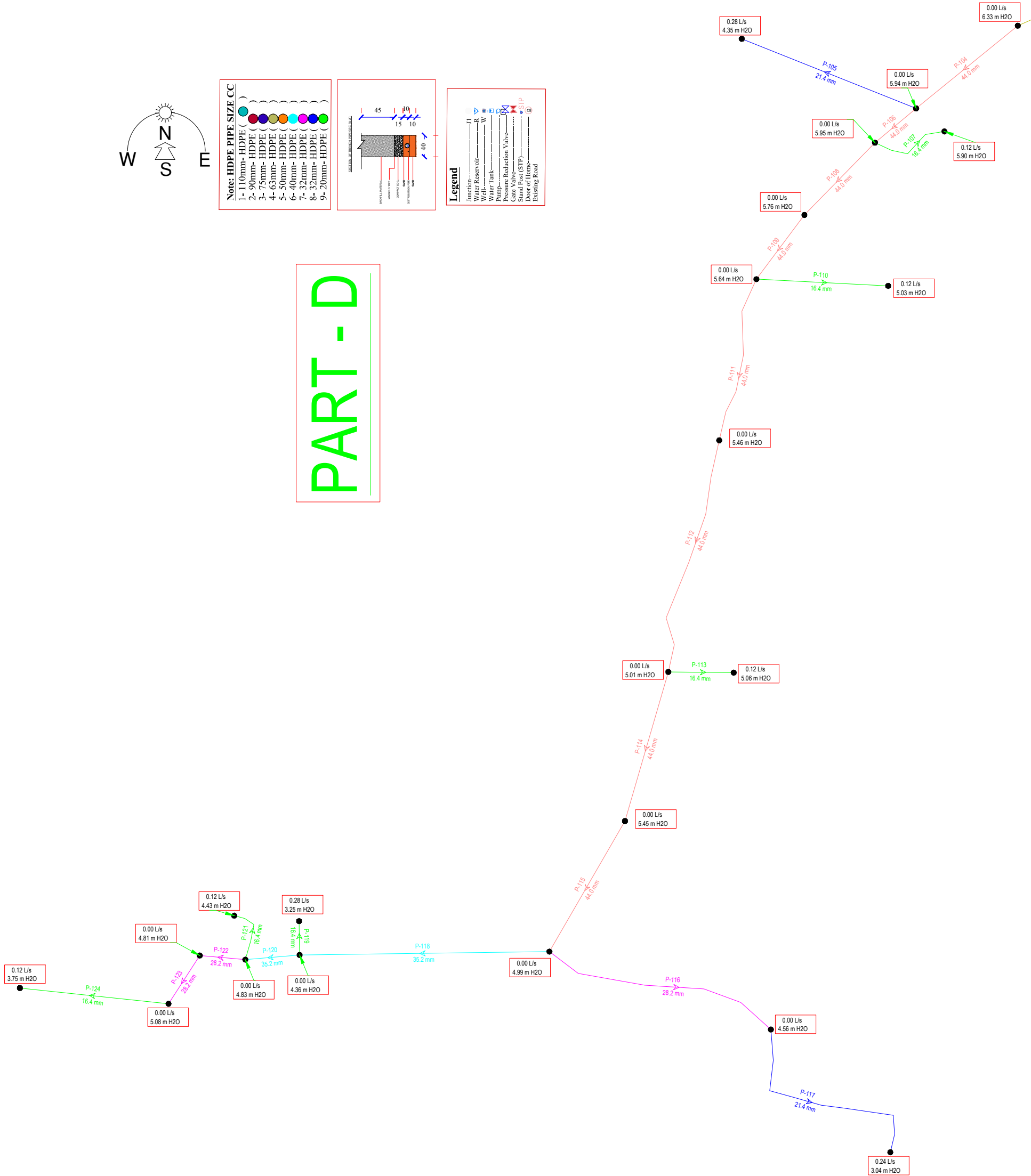
| |
|--------------------|
| 1- 110mm- HDPE () |
| 2- 90mm- HDPE () |
| 3- 75mm- HDPE () |
| 4- 63mm- HDPE () |
| 5- 50mm- HDPE () |
| 6- 40mm- HDPE () |
| 7- 32mm- HDPE () |
| 8- 25mm- HDPE () |
| 9- 20mm- HDPE () |



Legend

| | |
|--------------------------|-----|
| Junction | —J— |
| Water Reservoir | —R— |
| Water Tank | —W— |
| Pump | —P— |
| Pressure Reduction Valve | —V— |
| Gate Valve | —G— |
| Stand Pipe (SIP) | —S— |
| Existing Road | —R— |

PART - D



| | | | | | | | | | | | | | | | |
|--|-----------------------|-------------|-----------------------|-------------|-----------------------|------------|--------------------------|---------------|--|--|----------|----------|--------------|--|--|
| <div>AFGHANISTAN MEDAIR WASH Development</div> <div>MEDAIR</div> <div>WASH</div> | | | | SURVEYED BY | KHR - WASH Department | CHECKED BY | Eng Samiullah Azizi | SCALE | 1 :XX | <div><div>X</div><div>X</div></div> SHEET NO. | PROVINCE | Kandahar | PROJECT NAME | Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network | |
| DESIGNED BY | KHR - WASH Department | REVIEWED BY | Eng Wahidullah Majeed | DATE | | DISTRICT | ZHIRAI | DRAWING TITLE | Label & Inner Dia in Network while Demand & Pressure in Junction | | | | | | |
| DRAWN BY | KHR - WASH Department | APPROVED BY | Conner Wingerter | DRAWING NO | | VILLAGE | Hassanzai (Nahr-e-Kariz) | | | | | | | | |
| PART - D | | | | | | | | | | | | | | | |