



 AFGHANISTAN MEDAIR WASH Development WASH	SURVEYED BY	MEDAIR Engineering Dep	CHECKED BY	Eng Samiullah Azizi	SCALE	1:xx	SHEET NO. 	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 (7 individual)	Waiting Time (Second)	Flow in each Taps Lit/sec	Remarks
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 اناث 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. کندنکاری 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	

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	

75	P-46	J20	J21	57.9	40	35.2	PE100, PN10	140	0.48	0.493	0.01	
76	P-47	J21	STP-20	13.32	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
77	P-48	J21	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	J22	37.48	32	28.2	PE100, PN10	140	0.36	0.576	0.017	
80	P-51	J22	STP-21	50.56	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
81	P-52	J22	J23	49.46	25	21.4	PE100, PN10	140	0.24	0.667	0.03	
82	P-53	J23	STP-22	32.64	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
83	P-54	J23	STP-23	23.77	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
84	P-56	J25	STP-25	9.71	20	16.4	PE100, PN12.7	140	0.28	1.326	0.148	
85	P-57	J25	J26	43.3	75	66	PE100, PN10	140	4.28	1.251	0.026	
86	P-58	J26	STP-26	28.3	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
87	P-59	J26	J27	33.14	75	66	PE100, PN10	140	4.16	1.216	0.025	
88	P-60	J27	STP-27	38.16	25	21.4	PE100, PN10	140	0.2	0.556	0.022	
89	P-61	J27	J28	22.03	75	66	PE100, PN10	140	3.96	1.157	0.023	
90	P-62	J28	B 08	7.72	40	35.2	PE100, PN10	140	0.52	0.534	0.011	
91	P-63	B 08	J29	24.23	32	28.2	PE100, PN10	140	0.52	0.833	0.033	
92	P-64	J29	STP-28	10.75	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
93	P-65	J29	J30	15.62	32	28.2	PE100, PN10	140	0.4	0.64	0.02	
94	P-66	J30	STP-29	10.08	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
95	P-67	J30	STP-30	12.01	20	16.4	PE100, PN12.7	140	0.28	1.326	0.148	
96	P-68	J28	J50	70.53	75	66	PE100, PN10	140	3.44	1.005	0.017	
97	P-69	J50	J42	8.64	75	66	PE100, PN10	140	3.08	0.9	0.014	
98	P-70	J42	J32	24.44	63	55.4	PE100, PN10	140	1.56	0.647	0.009	
99	P-71	J32	STP-31	27.39	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
100	P-72	J32	B 12	31.51	32	28.2	PE100, PN10	140	0.36	0.576	0.017	
101	P-73	B 12	J34	14.5	32	28.2	PE100, PN10	140	0.36	0.576	0.017	
102	P-74	J34	STP-33	14.23	25	21.4	PE100, PN10	140	0.24	0.667	0.03	
103	P-75	J34	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	J32	J35	25.5	50	44	PE100, PN10	140	1.08	0.71	0.015	
106	P-78	J35	STP-34	13.02	20	16.4	PE100, PN12.7	140	0.2	0.947	0.079	
107	P-79	J35	B 15	17.91	40	35.2	PE100, PN10	140	0.88	0.904	0.03	
108	P-80	B 15	J38	11.51	50	44	PE100, PN10	140	0.88	0.579	0.01	
109	P-81	J38	B 151	23.74	32	28.2	PE100, PN10	140	0.36	0.576	0.017	
110	P-82	B 151	J36	19.59	32	28.2	PE100, PN10	140	0.36	0.576	0.017	
111	P-83	J36	STP-35	32.12	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
112	P-84	J36	J37	26.45	32	28.2	PE100, PN10	140	0.24	0.384	0.008	
113	P-85	J37	STP-36	30.48	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	

114	P-86	J37	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	J38	J39	25.02	40	35.2	PE100, PN10	140	0.52	0.534	0.011	
119	P-91	J39	STP-38	21.73	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
120	P-92	J39	J40	13.43	32	28.2	PE100, PN10	140	0.4	0.64	0.02	
121	P-93	J40	STP-39	9.51	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
122	P-94	J40	J41	13.15	32	28.2	PE100, PN10	140	0.28	0.448	0.011	
123	P-95	J41	STP-40	23.87	20	16.4	PE100, PN12.7	140	0.12	0.568	0.031	
124	P-96	J41	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	J25	77.63	90	79.2	PE100, PN10	140	4.56	0.926	0.012	

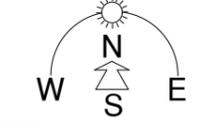
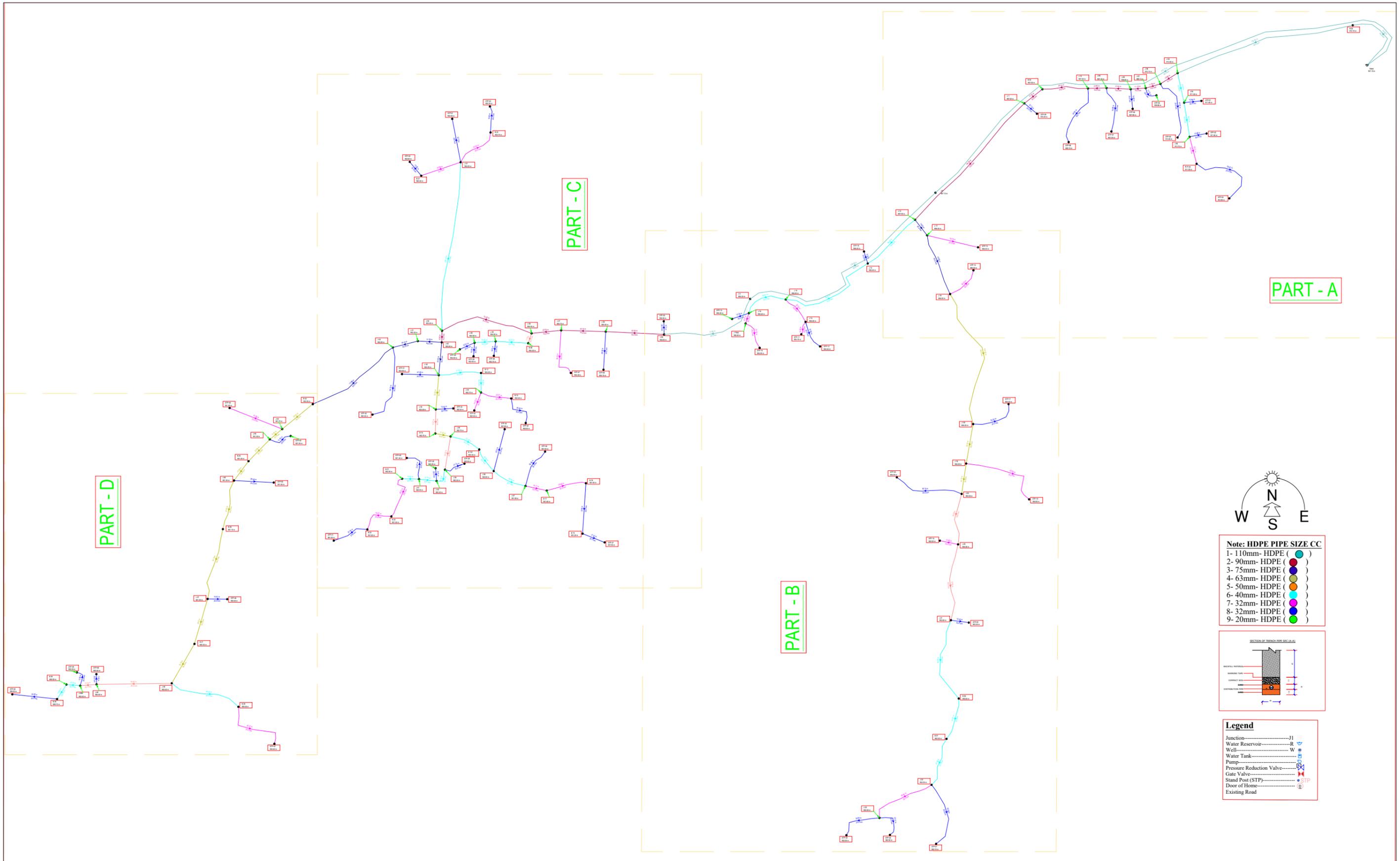
Joints Tabel of Hasanzai (Nahr-e-Kariz) village Solar Powered Water Supply Project

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	

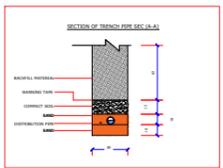
66	J 42	716599.39	3488329.82	903.4	0	909.25	5.84	
67	J 43	716563.06	3488326.02	903	0	908.92	5.91	
68	J 44	716480.88	3488265.53	901.7	0	907.65	5.94	
69	J 45	716471.7	3488257.85	901.5	0	907.46	5.95	
70	J 46	716445.19	3488227.34	901.3	0	906.95	5.64	
71	J 47	716425.51	3488139.49	901	0	906.02	5.01	
72	J 48	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	



Note: HDPE PIPE SIZE CC

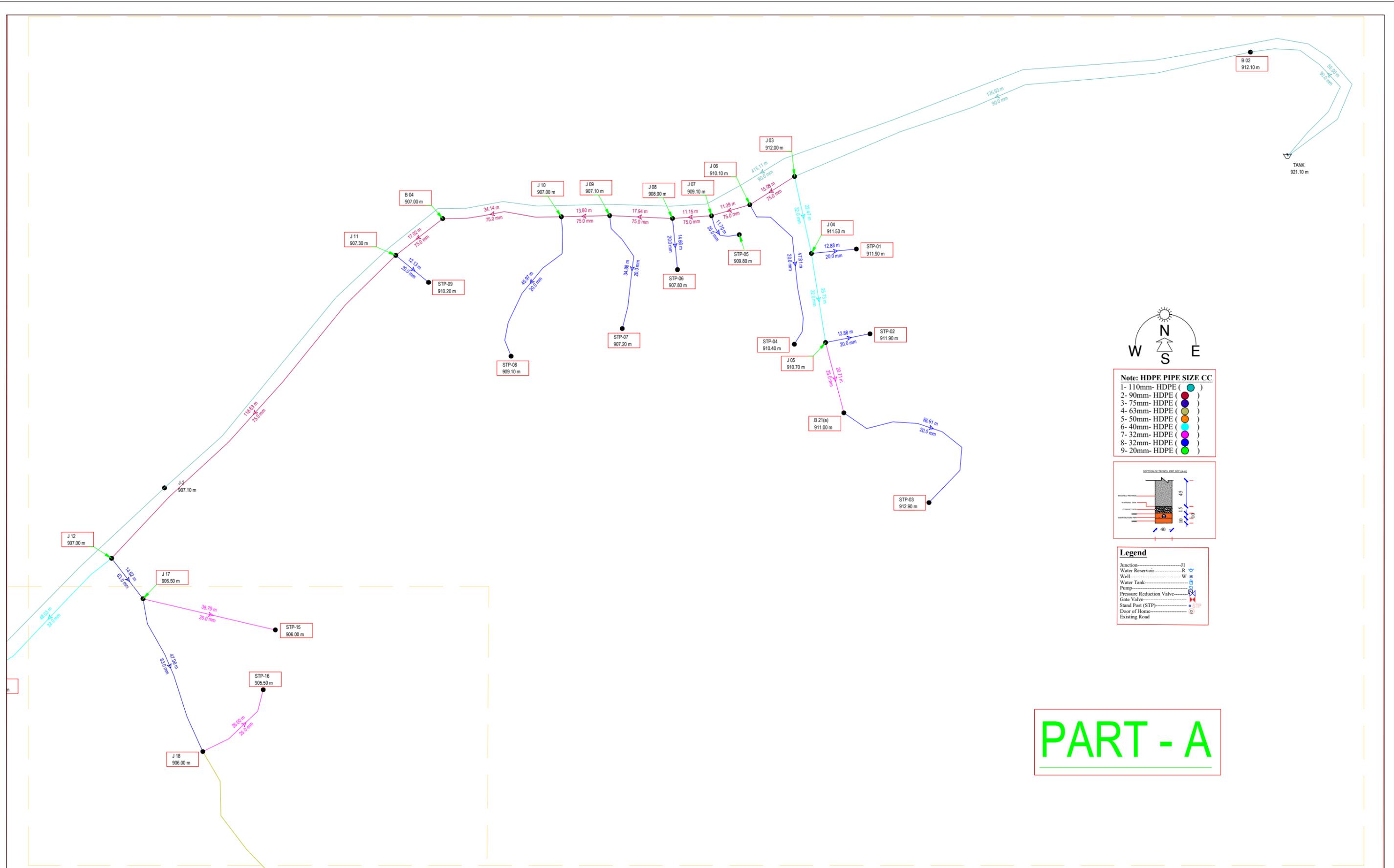
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2- 90mm- HDPE ()
3- 75mm- HDPE ()
4- 63mm- HDPE ()
5- 50mm- HDPE ()
6- 40mm- HDPE ()
7- 32mm- HDPE ()
8- 32mm- HDPE ()
9- 20mm- HDPE ()



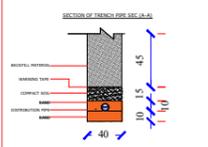
Legend

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

<p>AFGHANISTAN MEDAIR WASH Development</p> <p>WASH</p>	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			DISTRICT	ZHIRAI	
	DRAWN BY	KHR - WASH Department	APPROVED BY	Conner Wingerter	DRAWING NO.	SITE PLAN		VILLAGE	Hassanzai (Nahr-e-Kariz)	



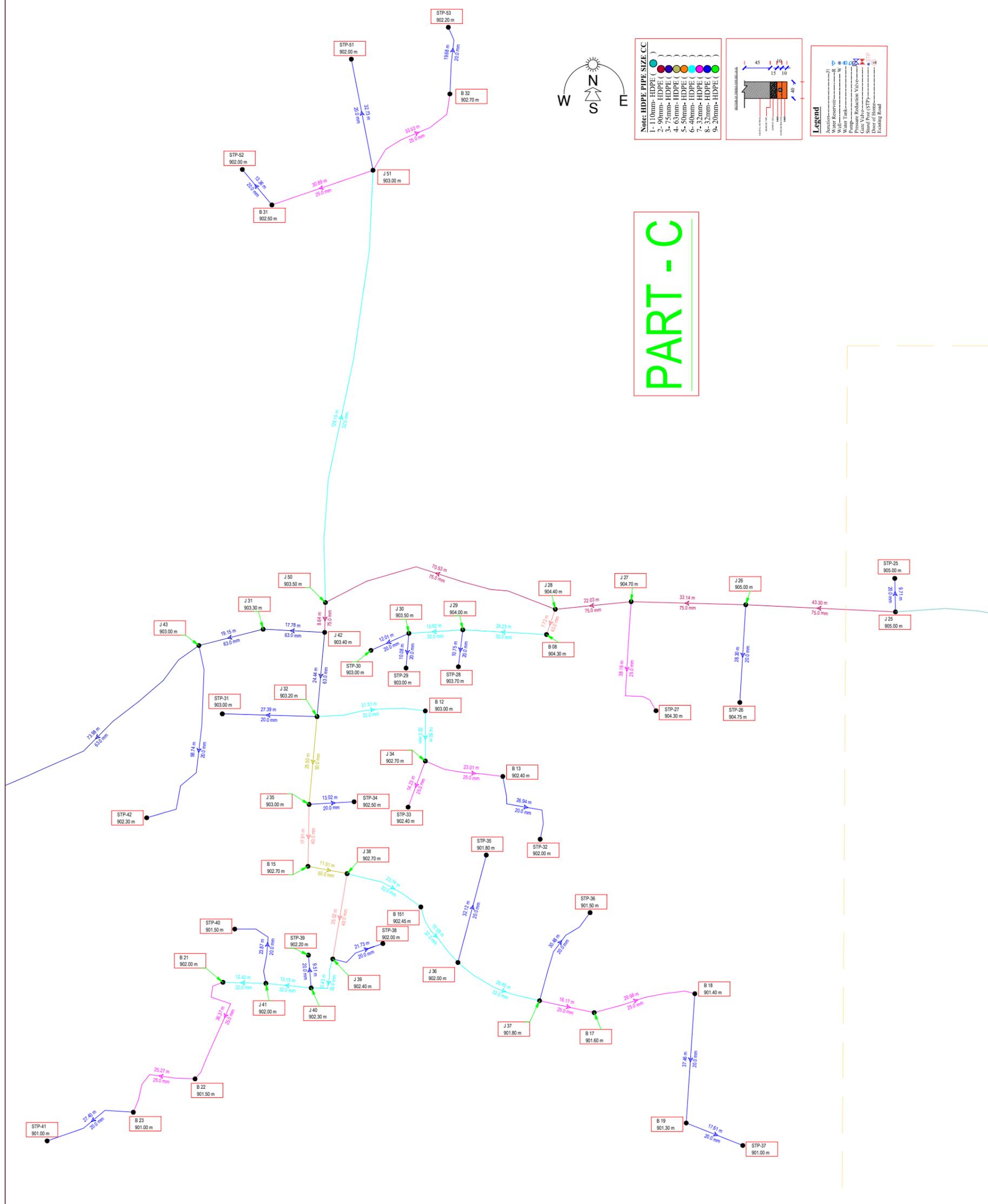
- Note: HDPE PIPE SIZE CC**
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 - 2- 90mm- HDPE ()
 - 3- 75mm- HDPE ()
 - 4- 63mm- HDPE ()
 - 5- 50mm- HDPE ()
 - 6- 40mm- HDPE ()
 - 7- 32mm- HDPE ()
 - 8- 32mm- HDPE ()
 - 9- 20mm- HDPE ()



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

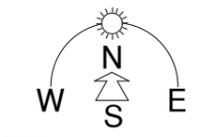
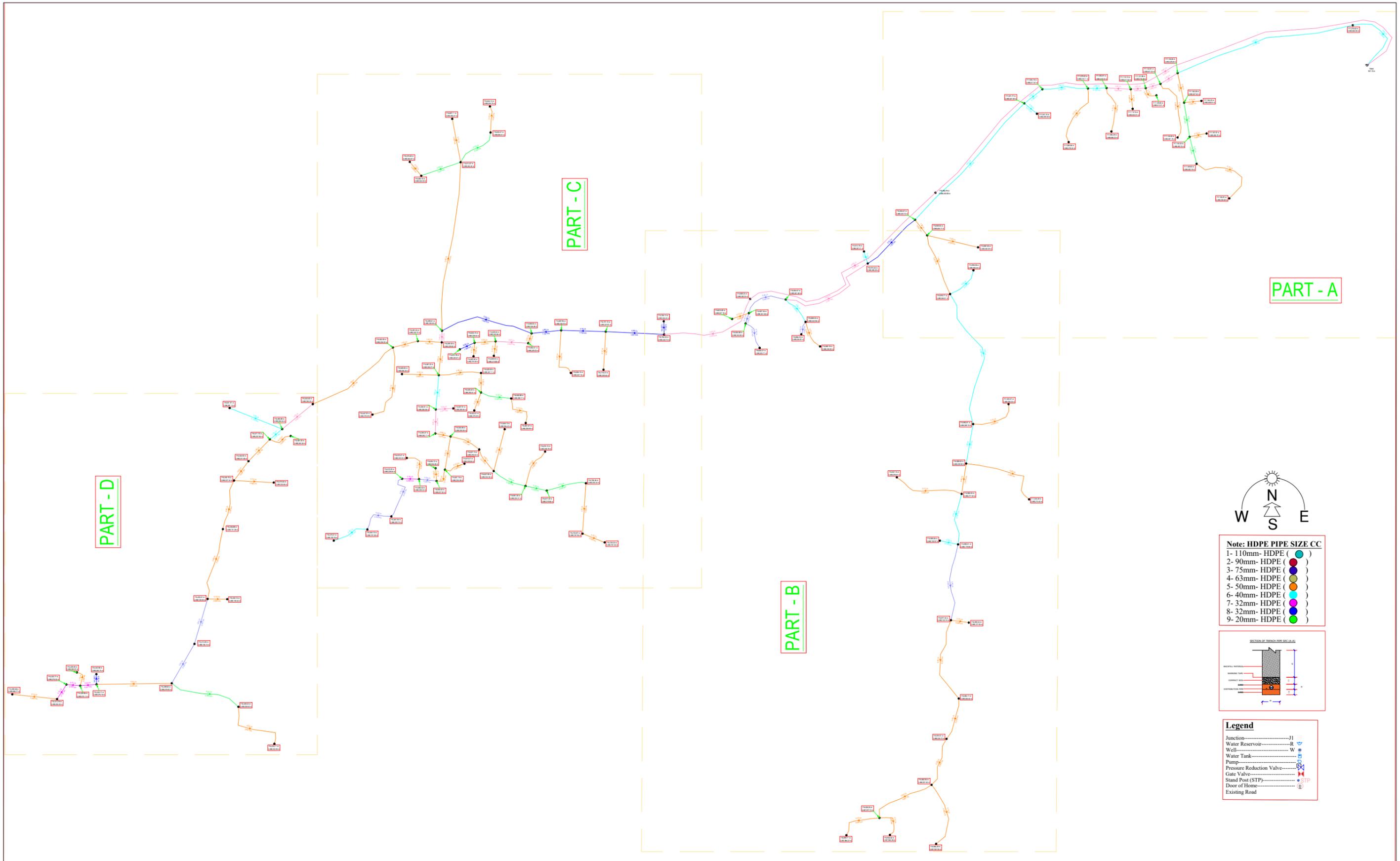
PART - A

<p>AFGHANISTAN MEDAIR WASH Development</p> <p>WASH</p>	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	Outer Dia & Length in Network while Label & Elevation in Junction
	DRAWN BY	KHR - WASH Department	APPROVED BY	Conner Wingerter	DRAWING NO.	PART - A		VILLAGE	Hassanzai (Nahr-e-Kariz)		



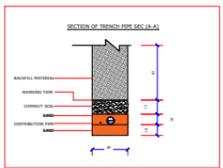
PART - C

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



Note: HDPE PIPE SIZE CC

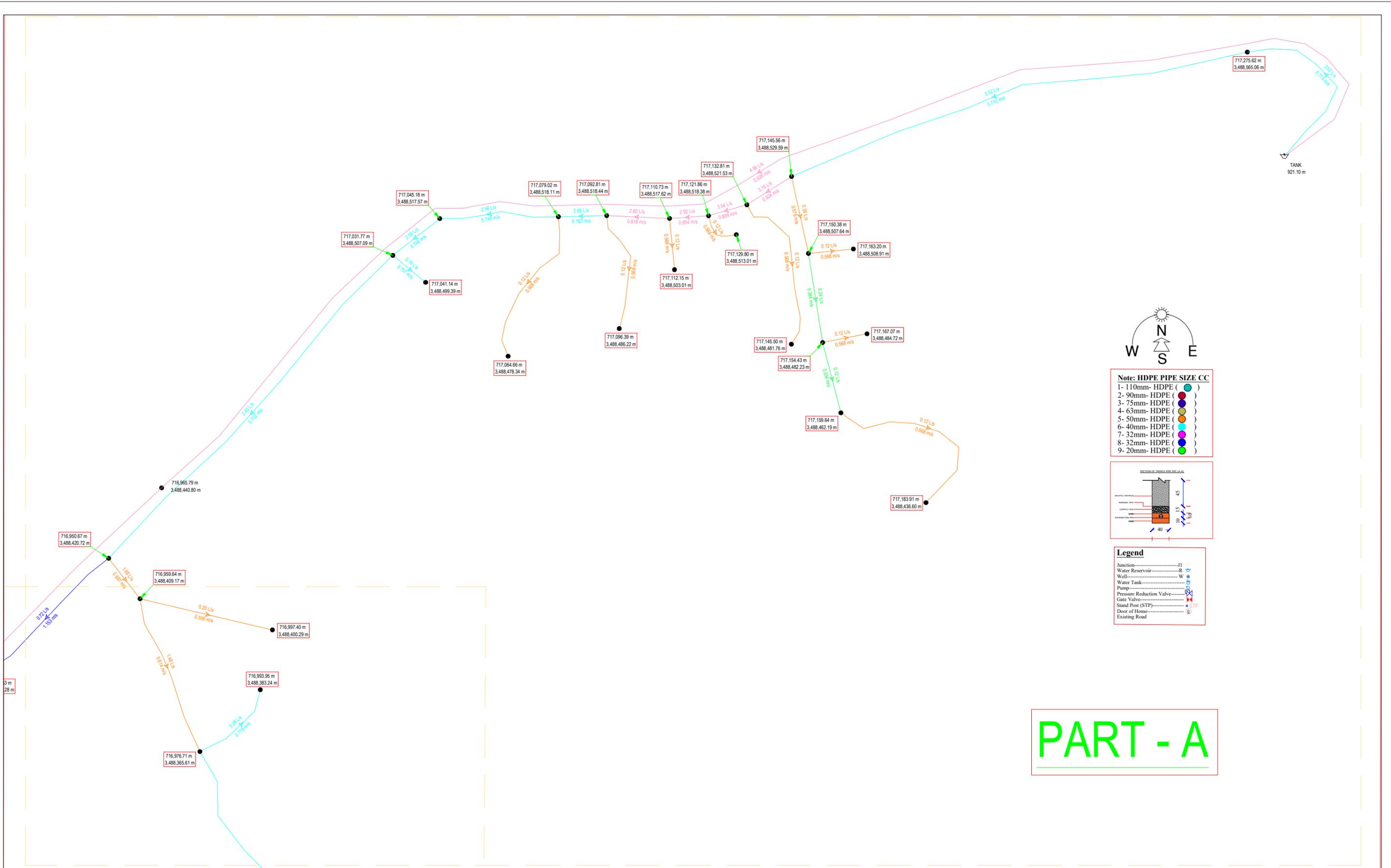
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8- 32mm- HDPE ()
9- 20mm- HDPE ()



Legend

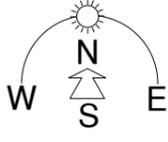
Junction	—J1
Water Reservoir	—R
Water Tank	—W
Well	—W
Pump	—P
Pressure Reduction Valve	—PRV
Gate Valve	—GV
Stand Post (STP)	—STP
Door of Home	—DH
Existing Road	—ER

<p>AFGHANISTAN MEDAIR WASH Development</p> <p>WASH</p>	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)	Flow & Velocity in Network while Coordinates in Junction	

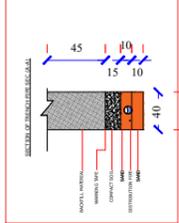


PART - A

	AFGHANISTAN MEDAIR WASH Development	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			DISTRICT	ZHIRAI	DRAWING TITLE	Flow & Velocity in Network while Coordinates in Junction
		DRAWN BY	KHR - WASH Department	APPROVED BY	Conner Wingerter	DRAWING NO.	PART - A		VILLAGE	Hassanzai (Nahr-e-Kariz)		

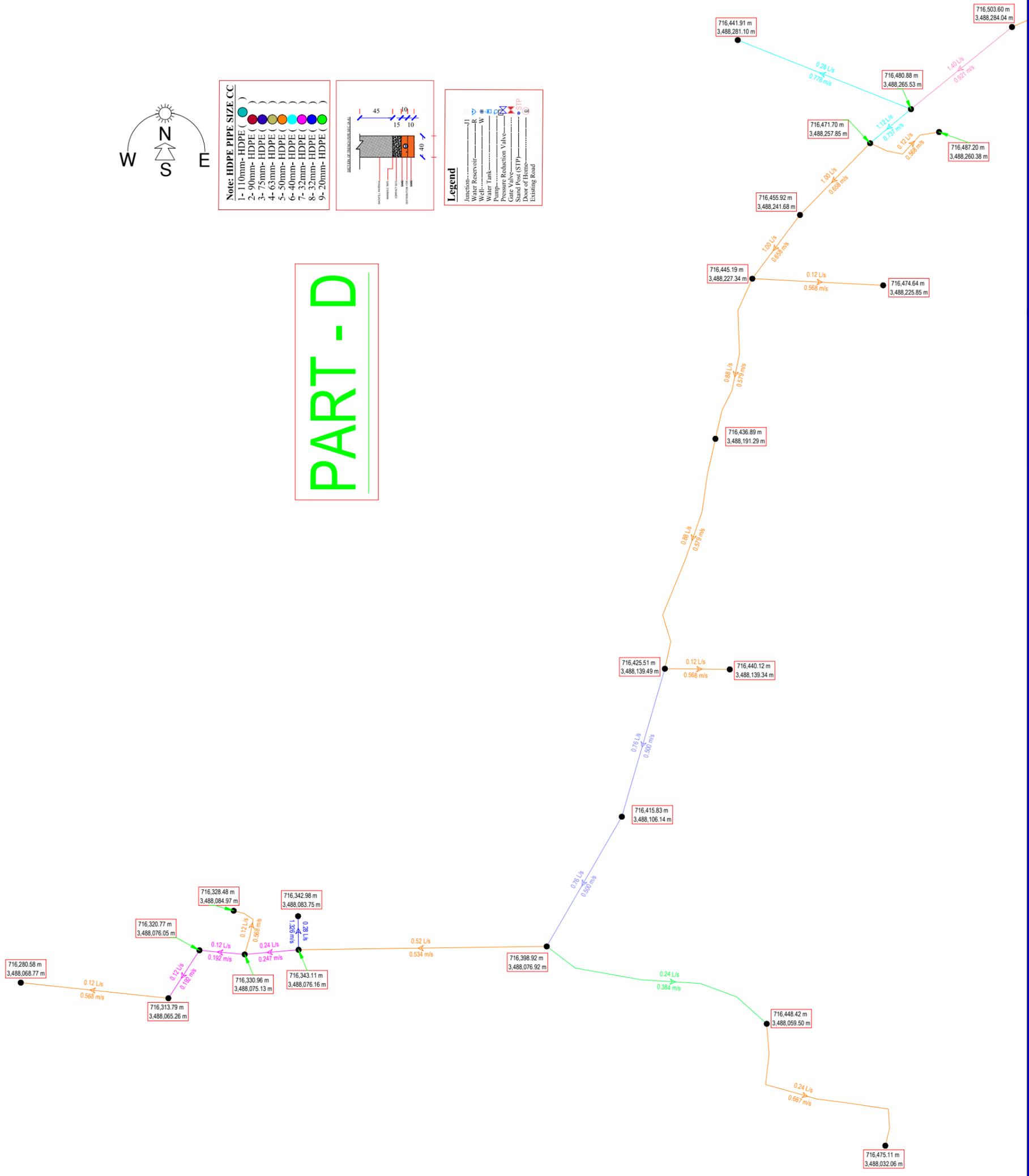


- Note: HDPE PIPE SIZE CC**
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 - 6- 40mm- HDPE ()
 - 7- 32mm- HDPE ()
 - 8- 25mm- HDPE ()
 - 9- 20mm- HDPE ()



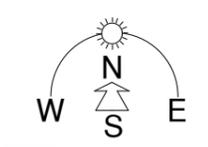
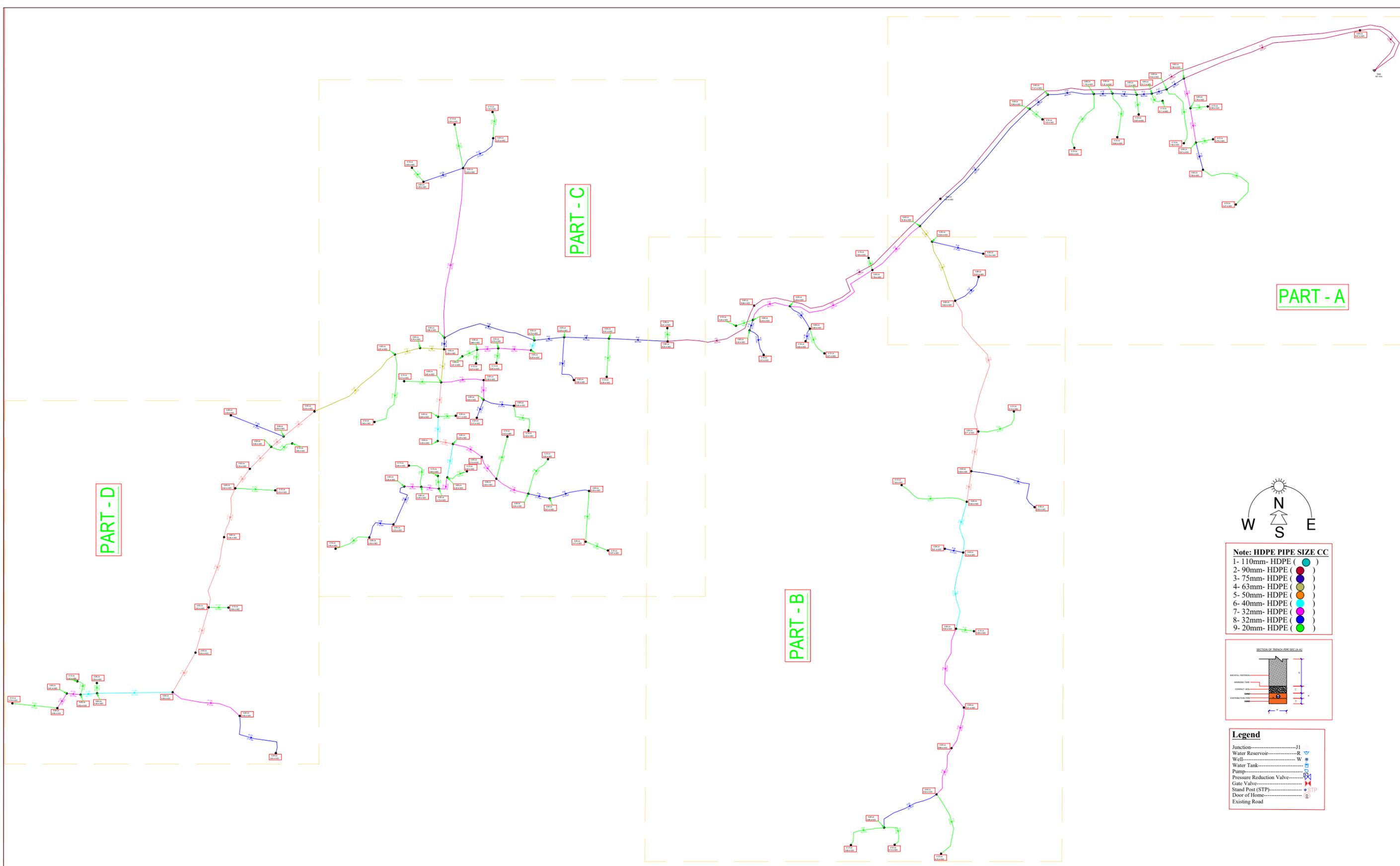
- Legend**
- Junction
 - Water Reservoir
 - Water Tank
 - Pump
 - Pressure Reduction Valve
 - Gate Valve
 - Stand Pipe (SIP)
 - Water Meter
 - Existing Road

PART - D



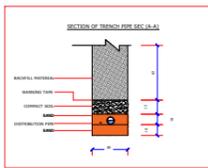
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	DESIGNED BY	KHR - WASH Department	REVIEWED BY	Eng Wahidullah Majeed	I : XX	PART - D	Kandahar	ZHIRAI	Hassanzai (Nahr-e-Kariz)	Solar Powered Water Supply Network	
DRAWN BY	KHR - WASH Department	APPROVED BY	Comner Wingerter								

WASH



Note: HDPE PIPE SIZE CC

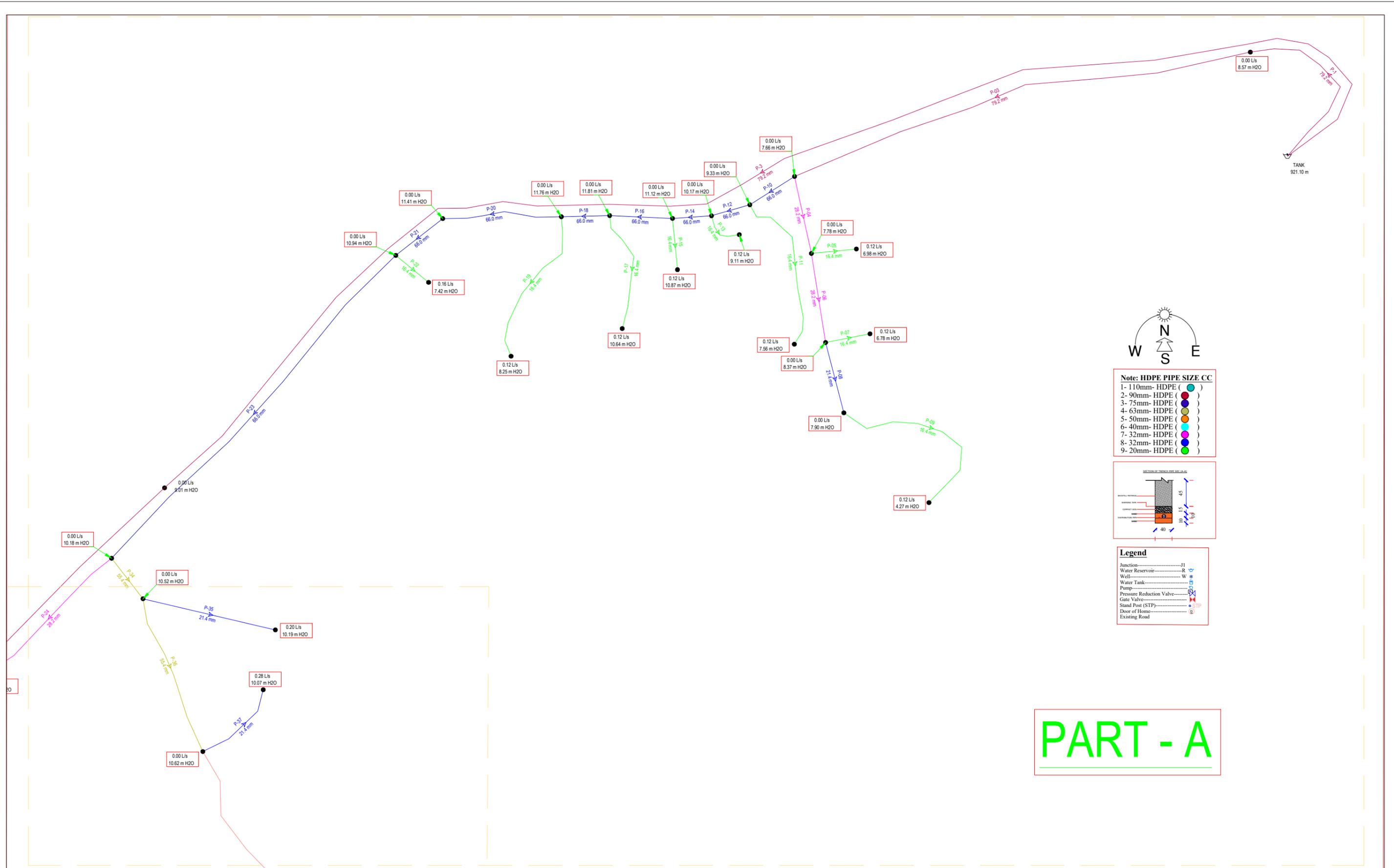
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4- 63mm- HDPE ()
5- 50mm- HDPE ()
6- 40mm- HDPE ()
7- 32mm- HDPE ()
8- 32mm- HDPE ()
9- 20mm- HDPE ()



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	—DH
Existing Road	—ER

<p>AFGHANISTAN MEDAIR WASH Development</p> <p>WASH</p>	SURVEYED BY	KHR - WASH Department	CHECKED BY	Eng Samiullah Azizi	SCALE	1:xx	<p>SHEET NO.</p>	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	



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 ()

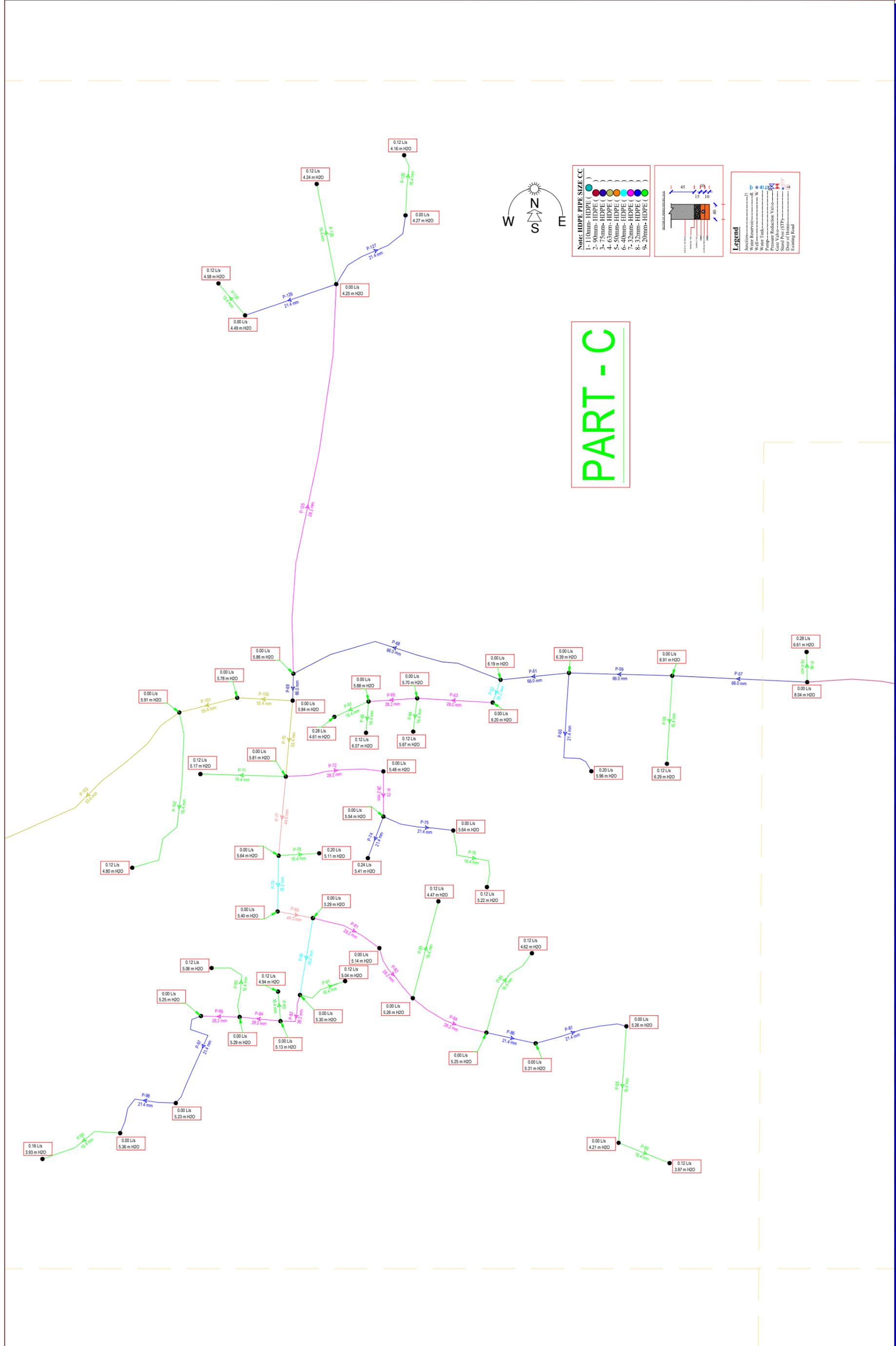
SECTION OF TRENCH (CM)

Legend

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

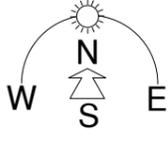
PART - A

	AFGHANISTAN MEDAIR WASH Development		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
	WASH		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.	PART - A		VILLAGE	Hassanzai (Nahr-e-Kariz)		



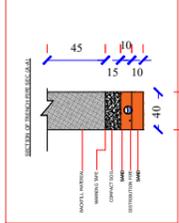
PART - C

 MEDAIR Development	SURVEYED BY	KHR - WASH Department	CHECKED BY	Eng Samiullah Azizi	SCALE	I : XX	SHEET	 ON	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
 MEDAIR Development	DRAWN BY	KHR - WASH Department	APPROVED BY	Comner Wingerter	DRAWING NO	PART - C		VILLAGE	Hassanzai (Nahr-e-Kariz)			



Note: HDPE PIPE SIZE CC

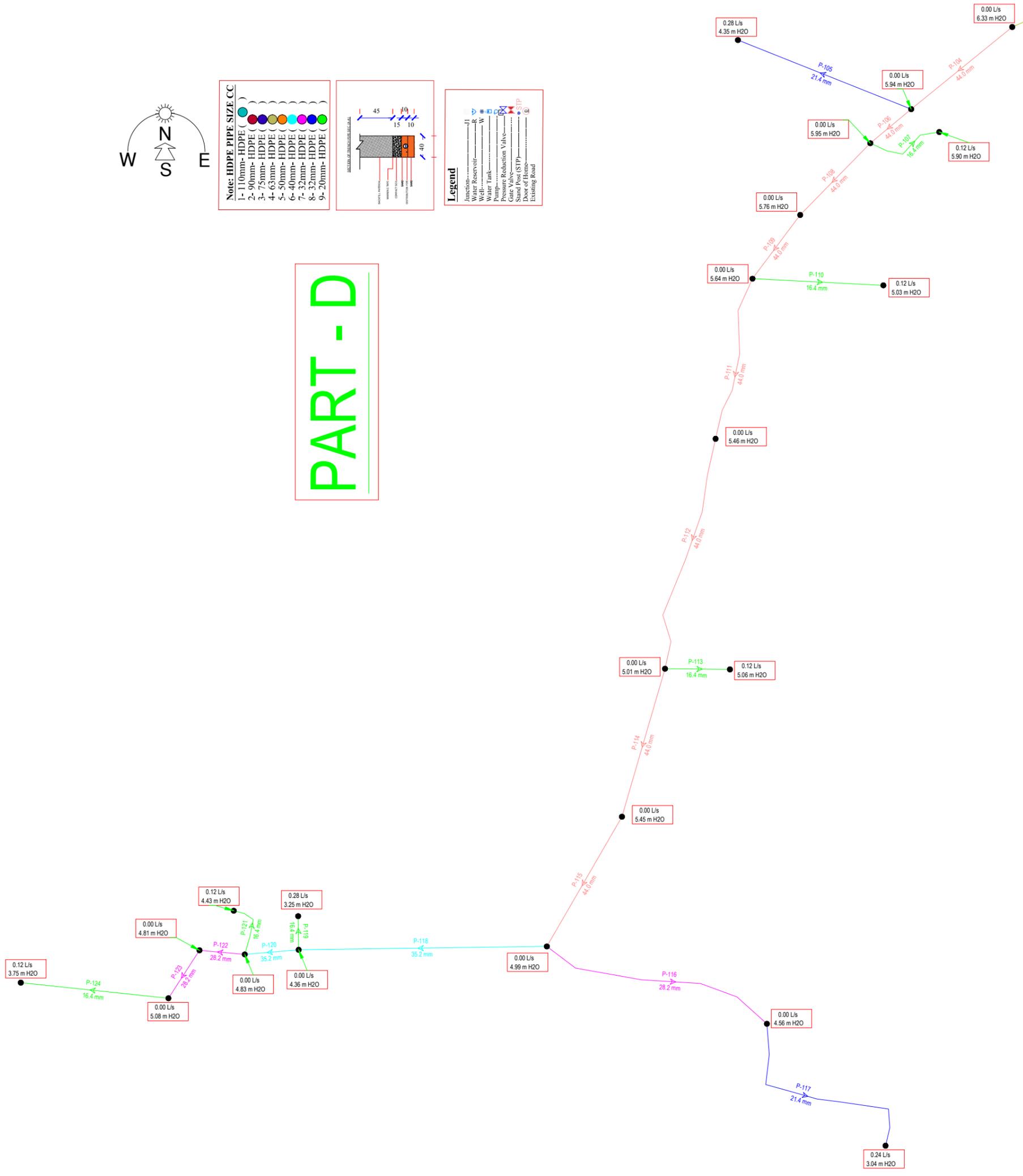
1- 110mm- HDPE ()
2- 90mm- HDPE ()
3- 75mm- HDPE ()
4- 63mm- HDPE ()
5- 50mm- HDPE ()
6- 40mm- HDPE ()
7- 32mm- HDPE ()
8- 25mm- HDPE ()
9- 20mm- HDPE ()



Legend

Junction	J
Water Reservoir	R
Water Tank	W
Pump	P
Pressure Reduction Valve	PRV
Gate Valve	G
Stand Pipe (SIP)	SIP
Water Main	WM
Existing Road	ER

PART - D



	SURVEYED BY	KHR - WASH Department	CHECKED BY	Eng Samiullah Azizi	SCALE	I : XX	SHEET NO	X X	VILLAGE	DISTRICT	Kandahar	PROJECT NAME	Hassanzai (Nahr-e-Kariz) Solar Powered Water Supply Network
	DESIGNED BY	KHR - WASH Department	REVIEWED BY	Eng Wahidullah Majeed	DATE	PART - D	DRAWING NO	DRAWING TITLE	ZHIRAI	Hassanzai (Nahr-e-Kariz)	Label & Inner Dia in Network while Demand & Pressure in Junction		
DRAWN BY	KHR - WASH Department	APPROVED BY	Comner Wingerter	DRAWING NO									

