City and County of Honolulu
Department of Transportation Services

Rapid Transit Division (RTD)

WEST O‘AHU/FARRINGTON HIGHWAY GUIDEWAY

Drawing No.	Drawing Description
GN002 (Volume 1)	Volume 1 Title Sheet
RP103 through RP112	Systems Site Plans
GN002 (Volume 2)	Volume 2 Title Sheet
UP112, UP126 through UP170A	Utility Relocation Plans Water, Sewer, Drainage, Petroleum, & Gas
UP201 through UP267	Utility Relocation Plans Electrical & Communications
SL029 through SL069	Street Lighting Plans
GN002 (Volume 3)	Volume 3 Title Sheet
GP001 through GP038	Structural Plan & Profiles

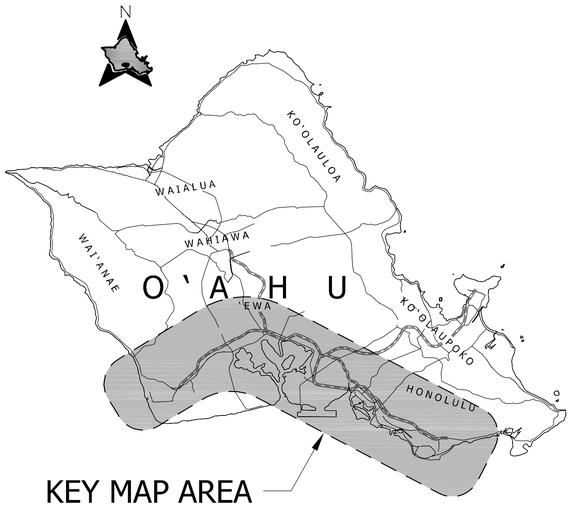
Prepared for:
HHCTCP

Prepared by:
Parsons Brinckerhoff
General Engineering Consultant (GEC)

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

WEST O'AHU/FARRINGTON DESIGN-BUILD

VOLUME 1 - CIVIL AND TRAFFIC



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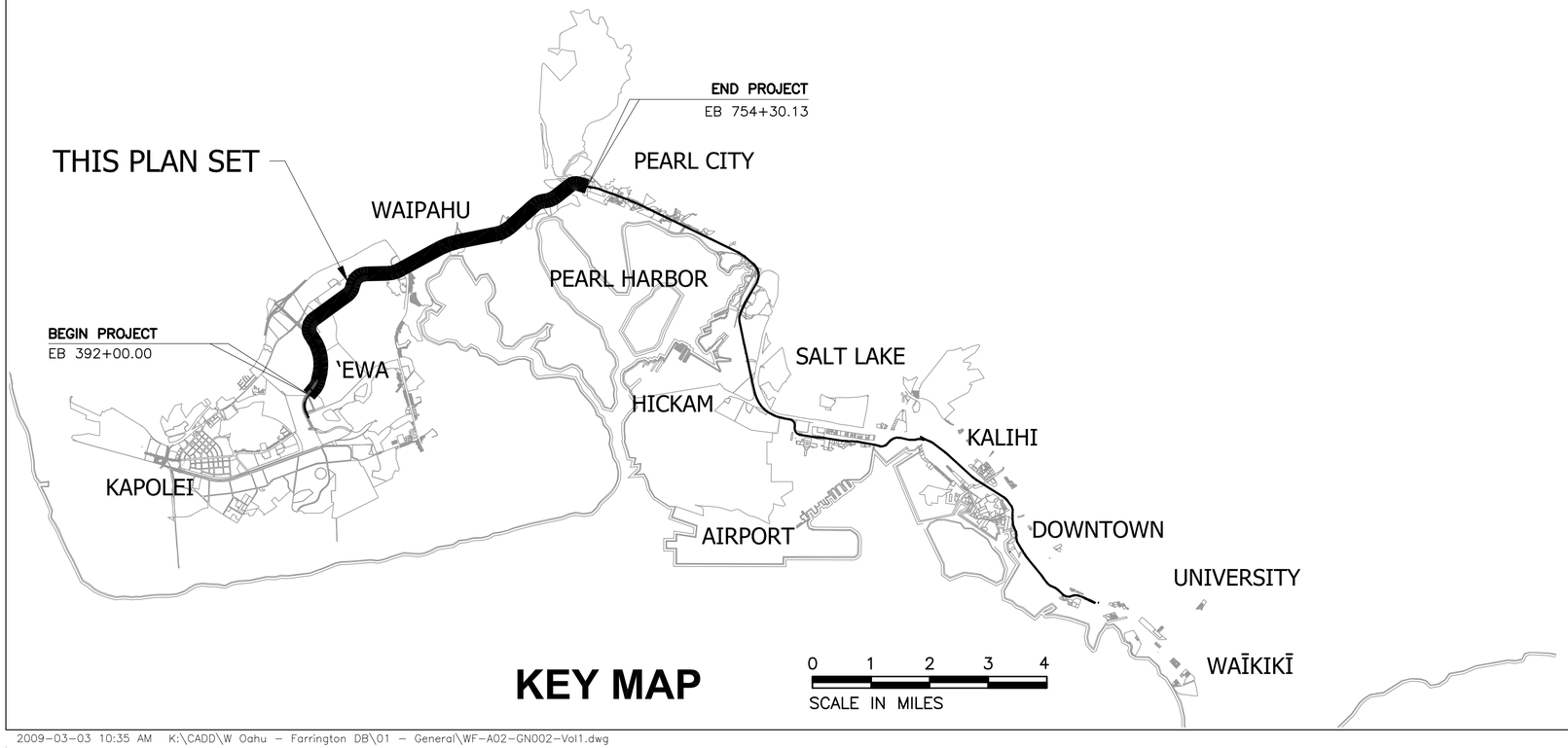
Rapid Transit Division



KEY MAP

03 APRIL 2009
ISSUED FOR BID
NOT FOR CONSTRUCTION

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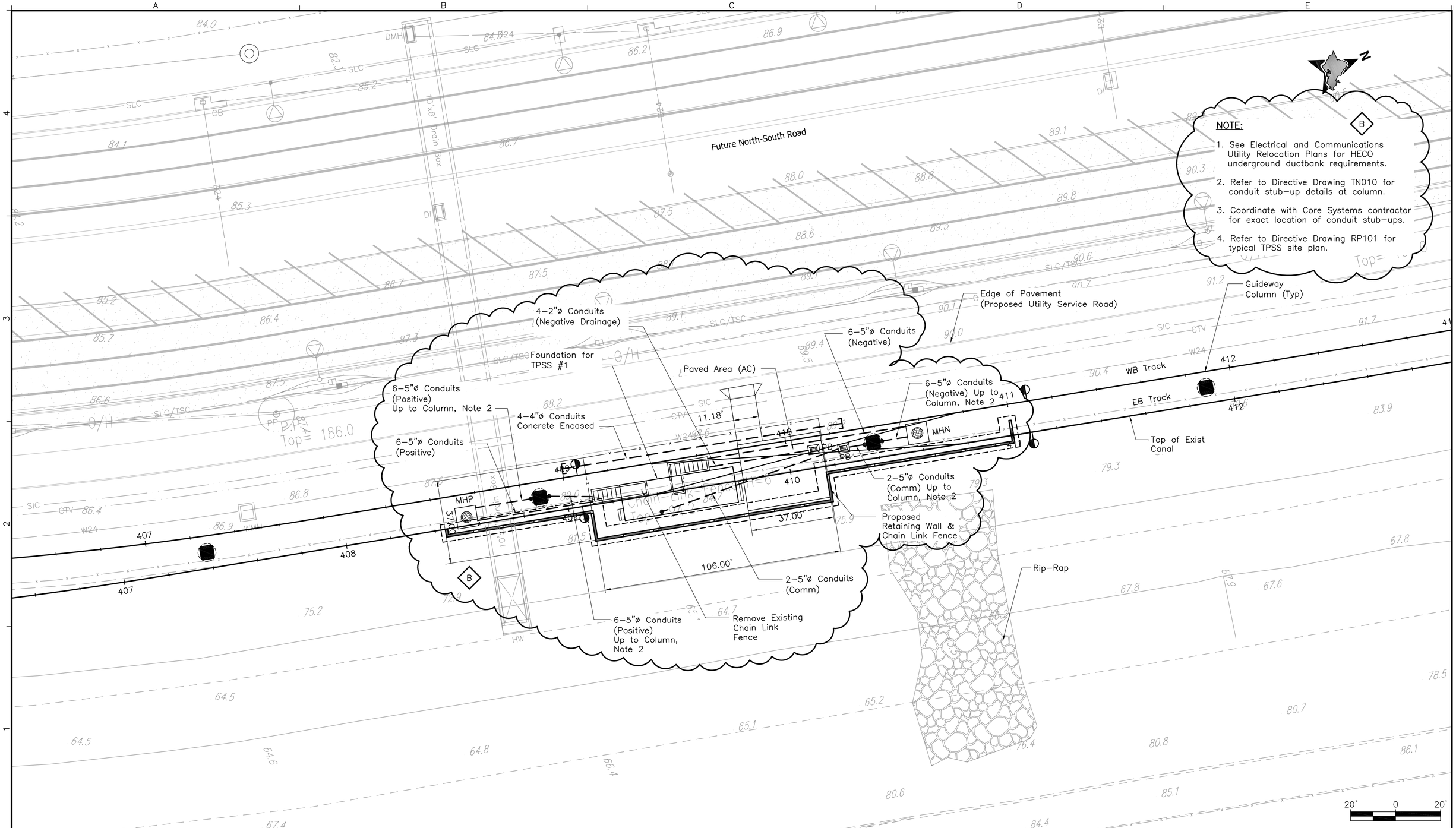

Rev	By	Date	Description
B	DG	05–22–09	Relocated TPSS & Routing of DuctBank
A	DG	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Gobelle
Drawn: C Jamison
Checked: L Mayola
Approved: M Hall
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 1

Contract No.: DB–1200
CADD File: WF–B10–RP103
Drawing No.: RP103 Rev. B
Scale: 1"=20'
Page No. 150 of 312

2009–05–20 10:12 AM K:\CADD\16 Communications\WF–B10–RP103.dwg

Future North-South Road

Future North-South Road Curb Line

Top of Exist Canal

Paved Area (AC)

Edge of Pavement (Proposed Utility Service Road)

2–5"ø Conduits (Comm)

6–5"ø Conduits (Negative)

4–2"ø Conduits (Negative Drainage)

6–5"ø Conduits (Positive)

To Station Comm Room

CONCRETE-ENCASED 4–4" CONDUITS

MHN

11.18'

40.00'

37.00'

106.00'

WB Track

EB Track

Guideway Column (Typ)

Foundation for TPSS #2

Proposed Retaining Wall & Chain Link Fence

Rip–Rap (Typ)

6–5"ø Conduits (Negative) Up to Column, Note 2

6–5"ø Conduits (Positive) Up to Column, Note 2

UH West O'ahu Station (NIC)

B

NOTE:

1. See Electrical and Communications Utility Relocation Plans for HECO underground ductbank equirements.
2. Refer to Directive Drawing TN010 for conduit stub–up details at Column.
3. Coordinate with Core Systems Contractor for exact location of conduit Stub–ups.
4. Refer to Directive Drawing RP101 for typical TPSS site plan.

20' 0 20'

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 2

Contract No.: DB–1200
CADD File: WF–B10–RP104
Drawing No: RP104 Rev. B
Scale: 1"=20'
Page No. 151 of 312

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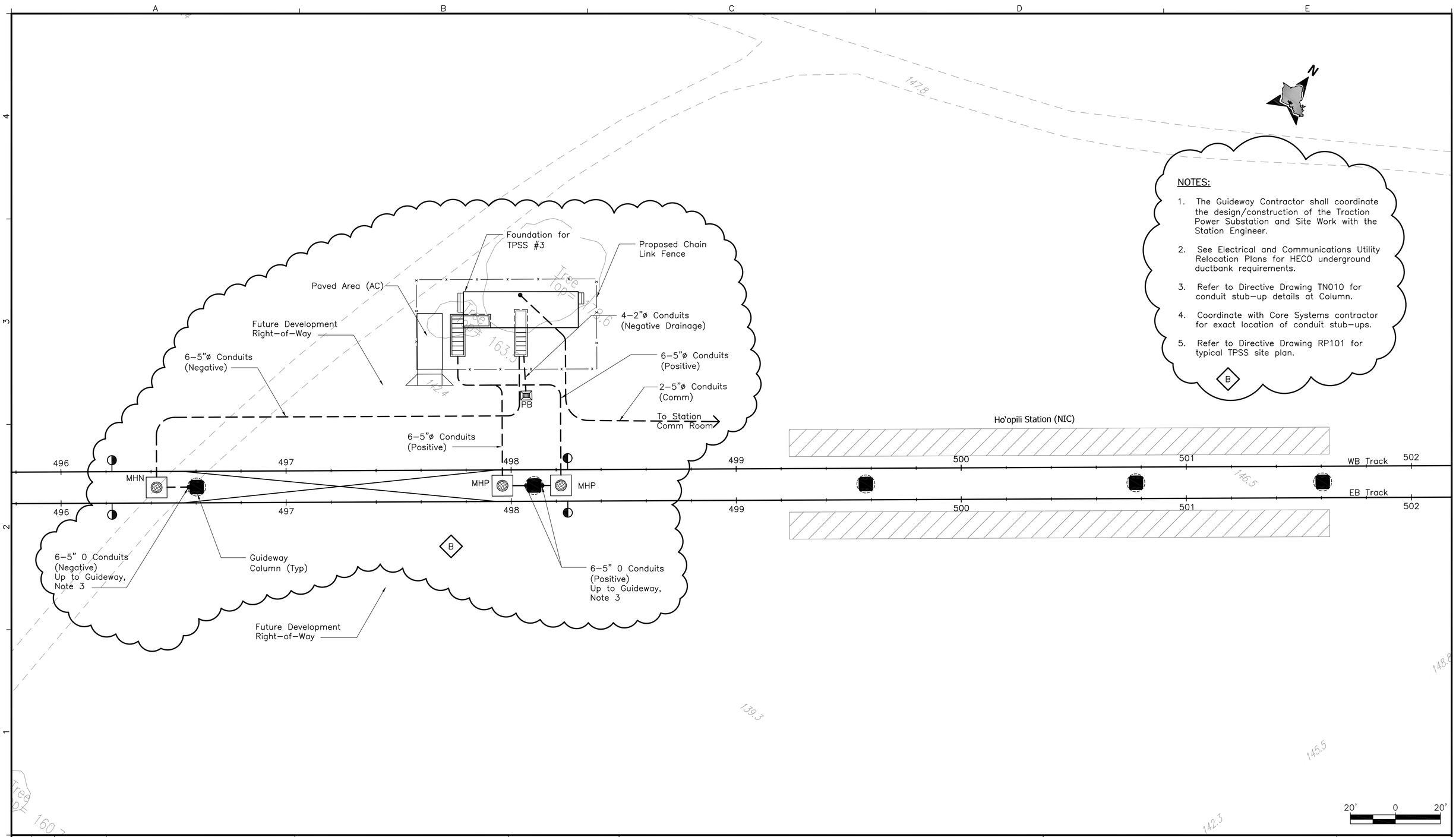

NOTES:

1. The Guideway Contractor shall coordinate the design/construction of the Traction Power Substation and Site Work with the Station Engineer.
2. See Electrical and Communications Utility Relocation Plans for HECO underground ductbank requirements.
3. Refer to Directive Drawing TN010 for conduit stub–up details at Column.
4. Coordinate with Core Systems contractor for exact location of conduit stub–ups.
5. Refer to Directive Drawing RP101 for typical TPSS site plan.

B

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 3

Contract No.: DB–1200
CADD File: WF–B10–RP105
Drawing No: RP105 Rev. B
Scale: 1"=20'
Page No. 152 of 312

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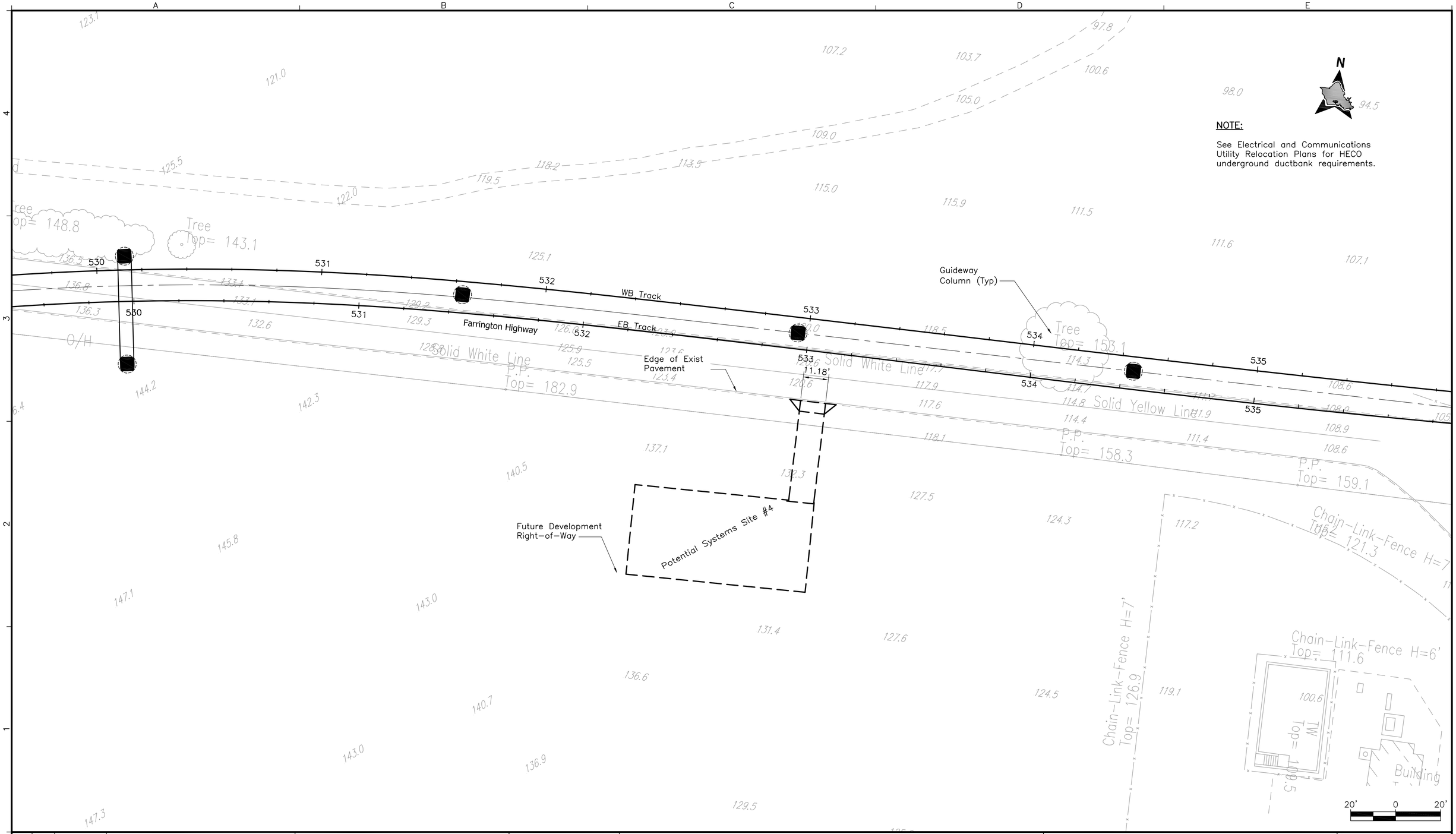

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 4

Contract No.: DB–1200
CADD File: WF–B10–RP106
Drawing No.: RP106
Rev.: A
Scale: 1"=20'
Page No.: 153 of 312

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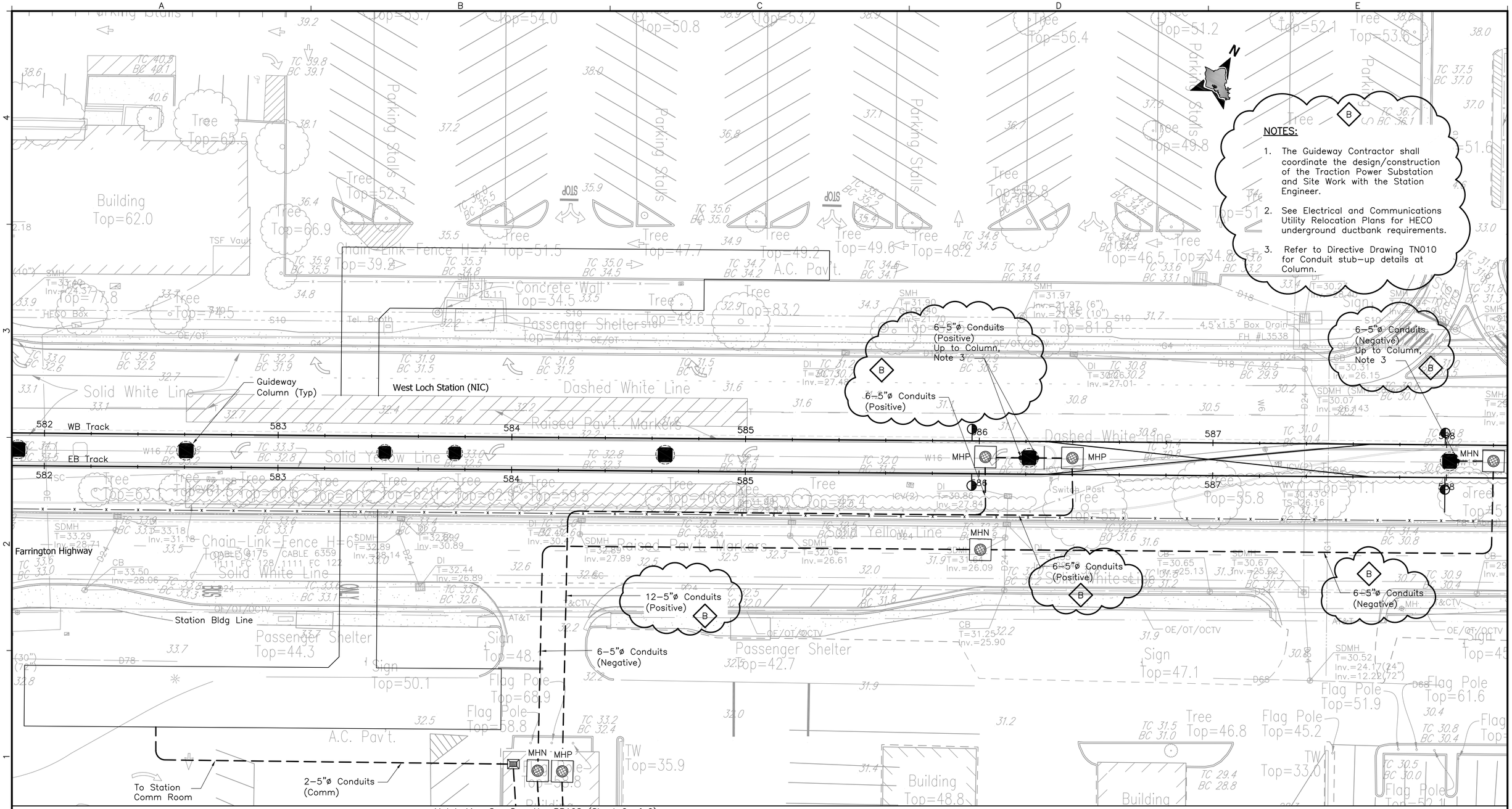

Rev	By	Date	Description
B	DG	05-220-9	Revised No of Conduits and Sizes
A	DG	04-03-09	Issued For Bid

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 5

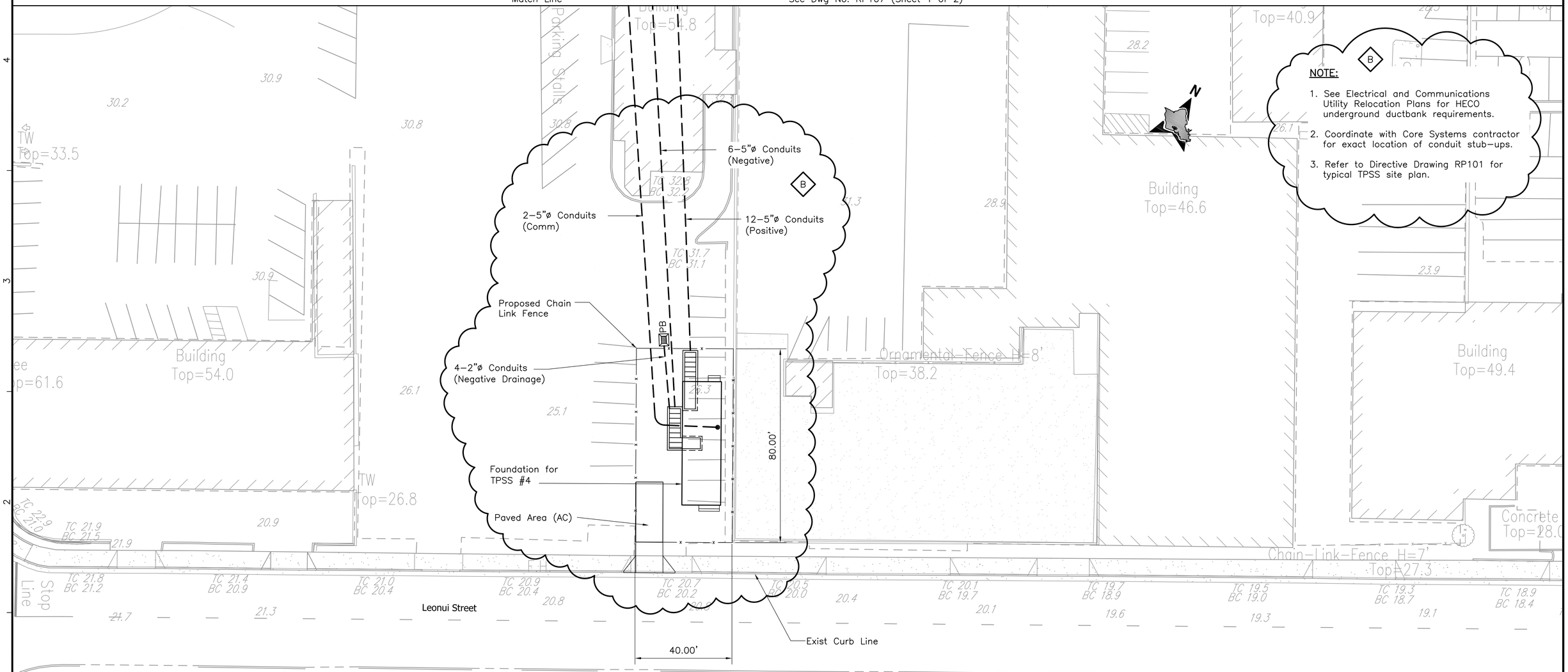
Sheet 1 of 2

Contract No.: DB-1200
CADD File: WF-B10-RP107
Drawing No: RP107 Rev. B
Scale: 1"=20'
Page No. 154 of 312

2009-05-18 3:14 PM K:\CADD\16 Communications\WF-B10-RP107.dwg

Match Line

See Dwg No. RP107 (Sheet 1 of 2)



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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 5

Sheet 2 of 2

Contract No.: DB–1200
CADD File: WF–B10–RP108
Drawing No.: RP108 Rev.: B
Scale: 1"=20'
Page No.: 155 of 312

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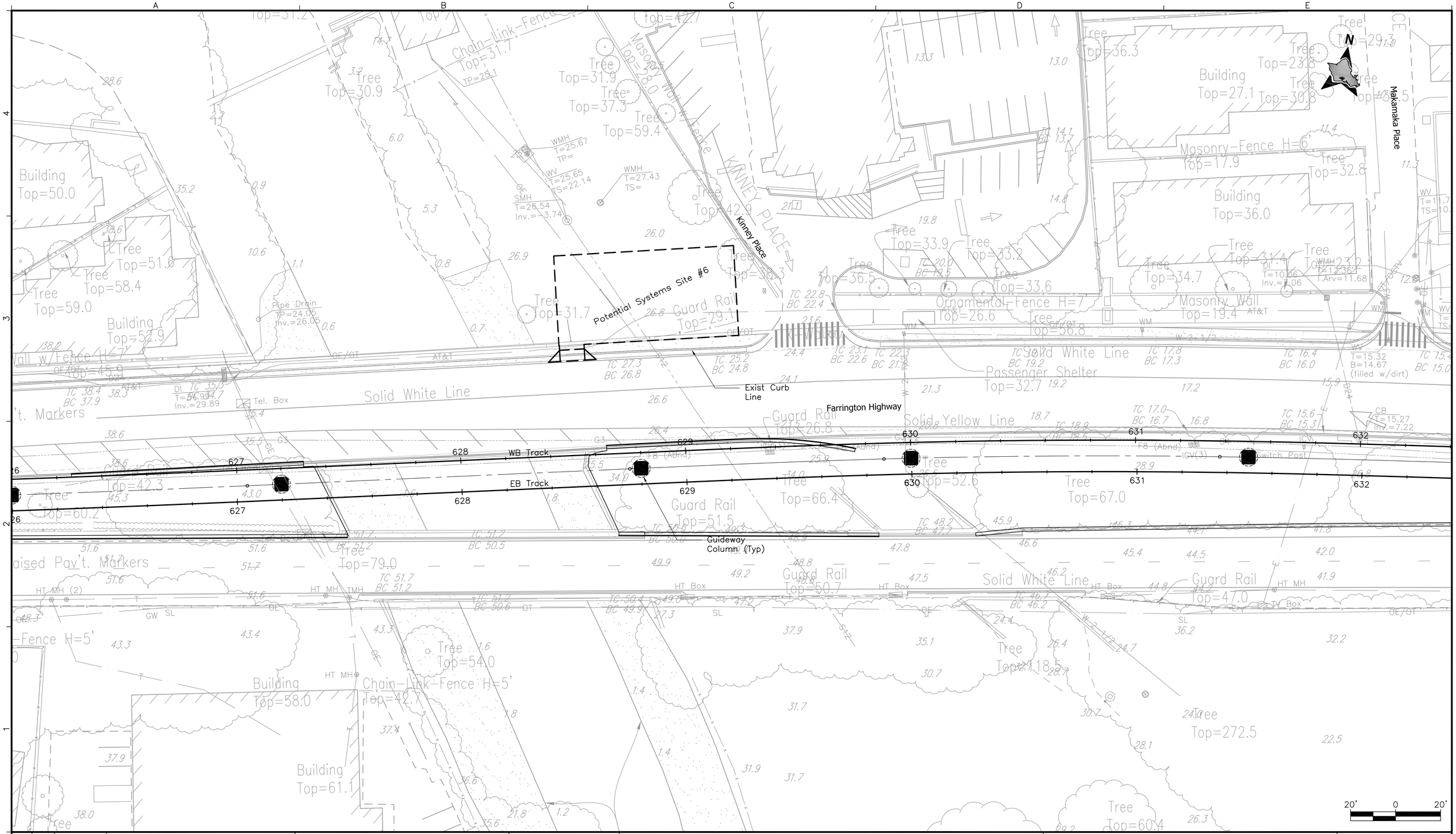

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 6

Contract No.: DB–1200
CADD File: WF–B10–RP109
Drawing No.: RP109 Rev.: A
Scale: 1"=20'
Page No.: 156 of 312

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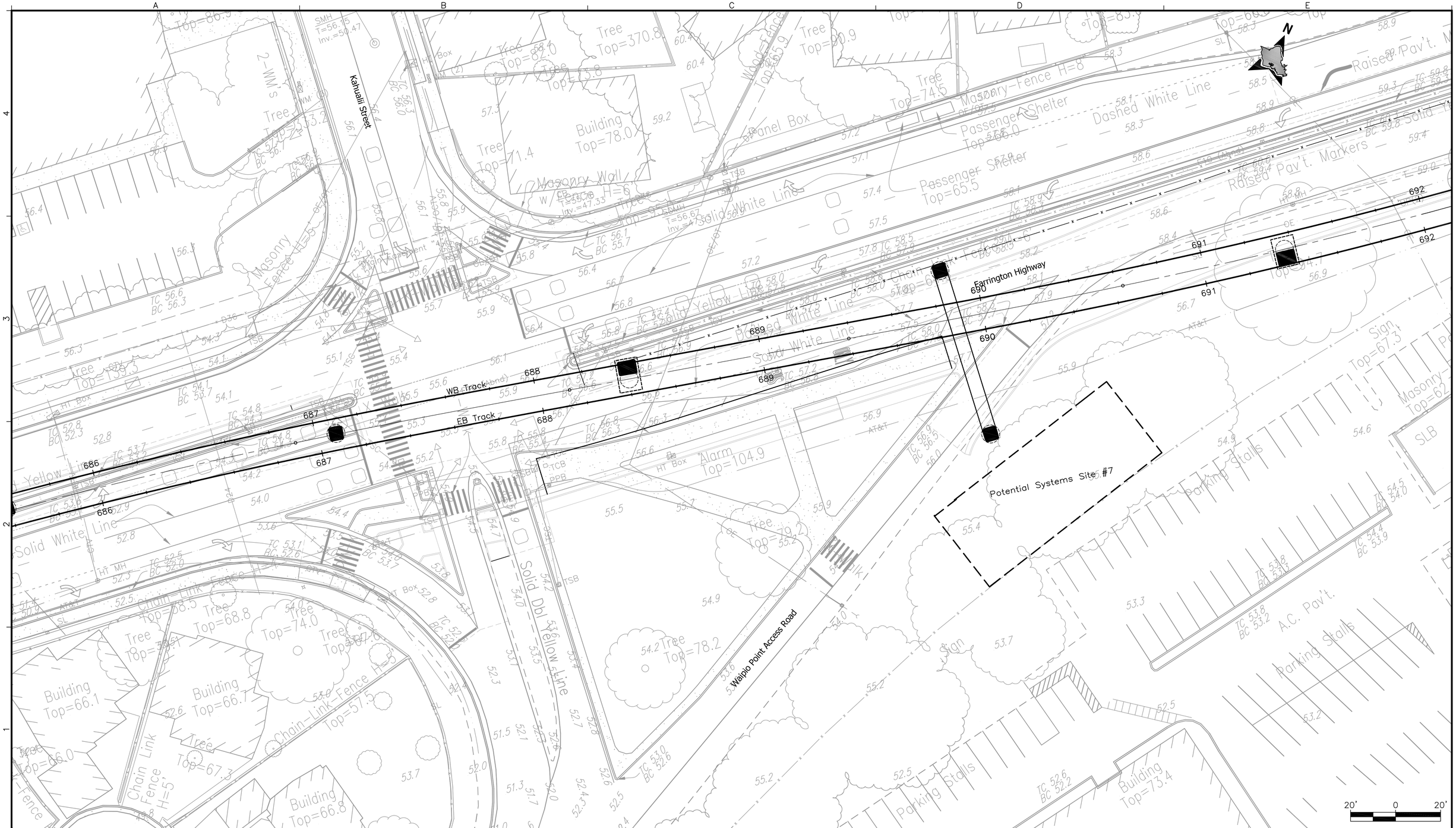

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WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 7

Contract No.: DB–1200
CADD File: WF–B10–RP110
Drawing No: RP110 Rev. A
Scale: 1"=20'
Page No. 157 of 312

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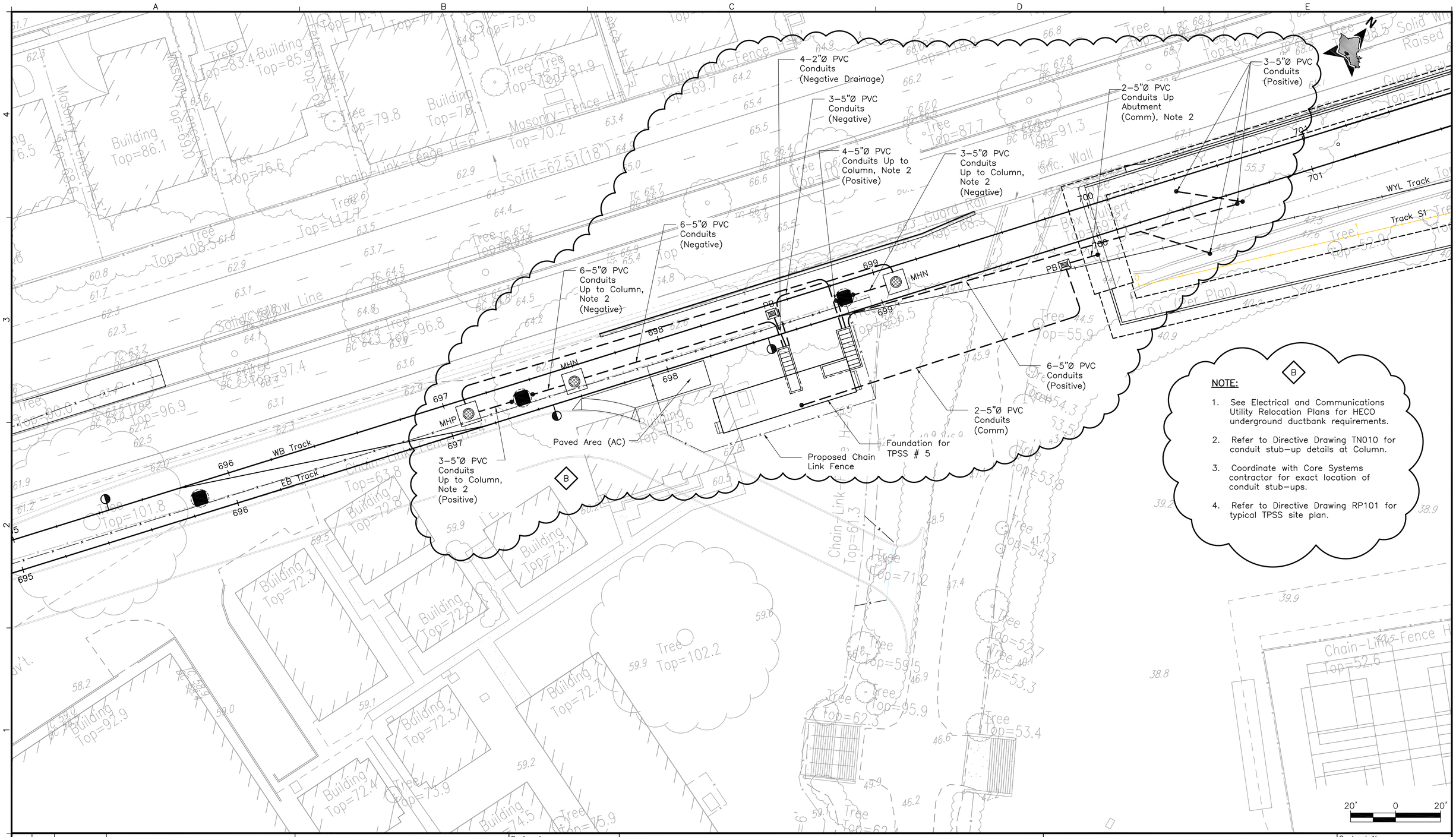
4–2"Ø PVC Conduits (Negative Drainage)
3–5"Ø PVC Conduits (Negative)
4–5"Ø PVC Conduits Up to Column, Note 2 (Positive)
3–5"Ø PVC Conduits Up to Column, Note 2 (Negative)
2–5"Ø PVC Conduits Up Abutment (Comm), Note 2
3–5"Ø PVC Conduits (Positive)
6–5"Ø PVC Conduits (Negative)
6–5"Ø PVC Conduits Up to Column, Note 2 (Negative)
6–5"Ø PVC Conduits (Positive)
2–5"Ø PVC Conduits (Comm)
3–5"Ø PVC Conduits Up to Column, Note 2 (Positive)
Paved Area (AC)
Proposed Chain Link Fence
Foundation for TPSS # 5
MHP
MHN
PB
WB Track
EB Track
WYL Track
Track S1
Guard Rail
Chain-Link Fence H=6'
Masonry Fence
Solid Wall
Box Culvert
Retaining Wall
Soffit=62.51(18")
Soffit=63.18
Invert=58.68
Invert=58.82
Building Top=86.1
Building Top=85.9
Building Top=83.4
Building Top=78.0
Building Top=72.8
Building Top=73.1
Building Top=72.3
Building Top=72.8
Building Top=92.9
Building Top=72.7
Building Top=72.3
Building Top=72.4
Building Top=74.5
Tree Top=102.2
Tree Top=101.8
Tree Top=108.5
Tree Top=97.4
Tree Top=96.9
Tree Top=96.8
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Tree Top=79.8
Tree Top=76.6
Tree Top=75.6
Tree Top=81.9
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Tree Top=59.5
Tree Top=62.3
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Tree Top=53.4
Tree Top=53.3
Tree Top=54.3
Tree Top=55.9
Tree Top=52.0
Tree Top=53.8
Chain-Link Top=61.3
Chain-Link Top=52.6
Chain-Link Fence H=6'
Top=70.2
Top=63.8
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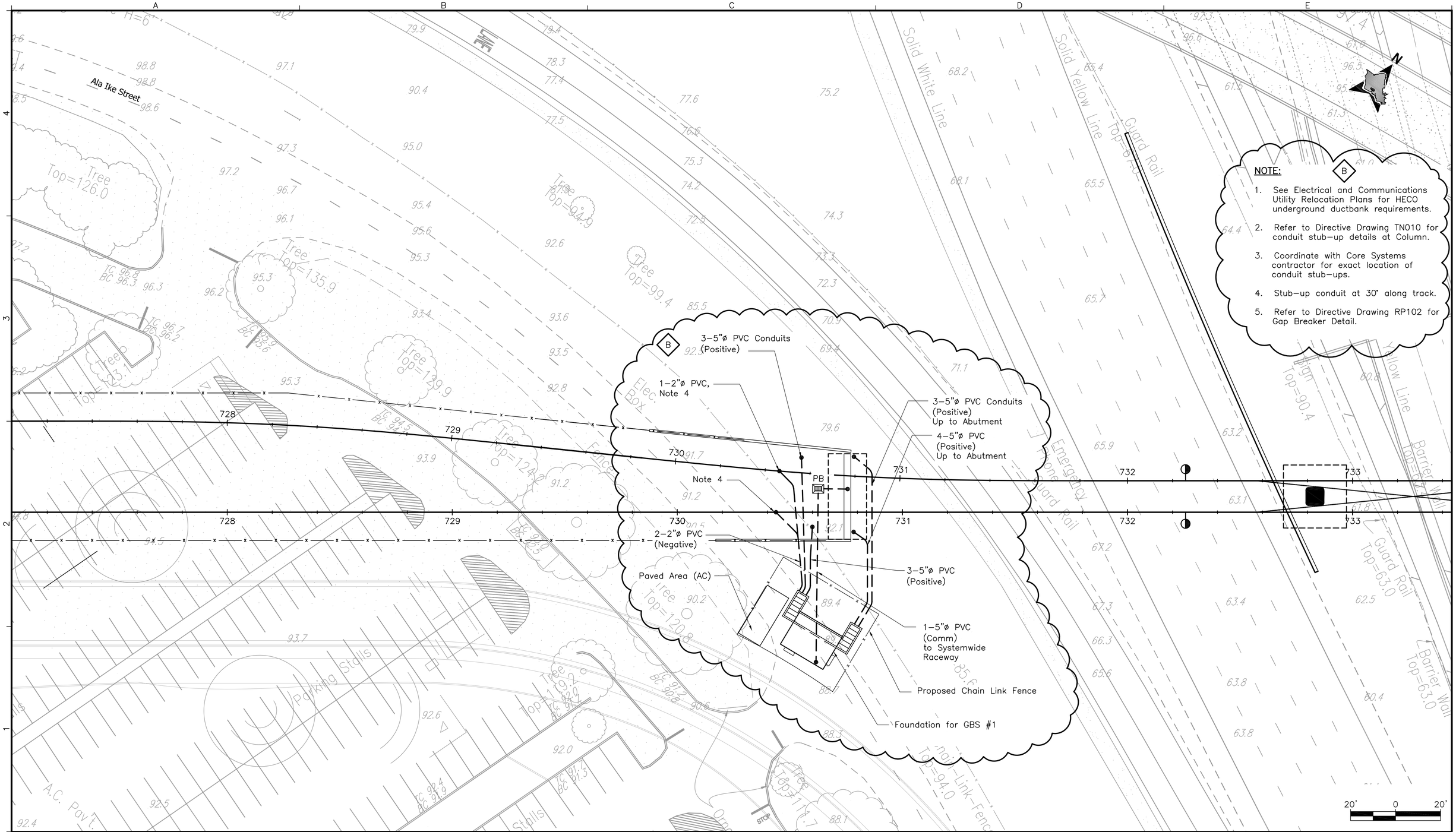


NOTE: (B)

1. See Electrical and Communications Utility Relocation Plans for HECO underground ductbank requirements.
2. Refer to Directive Drawing TN010 for conduit stub–up details at Column.
3. Coordinate with Core Systems contractor for exact location of conduit stub–ups.
4. Stub–up conduit at 30° along track.
5. Refer to Directive Drawing RP102 for Gap Breaker Detail.

Rev	By	Date	Description
B	DG	05–22–09	Relocated TPSS & Routing of DuctBank
A	DG	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Gobelle
Drawn: C Jamison
Checked: L Mayola
Approved: M Hall
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

SYSTEMS SITE PLAN
SITE # 9

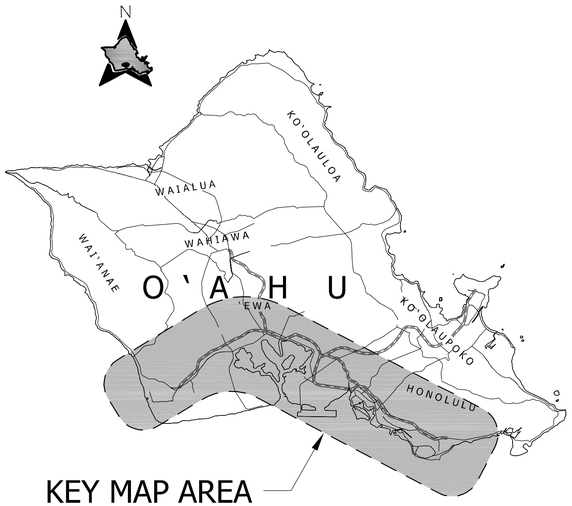
Contract No.: DB–1200
CADD File: WF–B10–RP112
Drawing No: RP112 Rev. B
Scale: 1"=20'
Page No. 159 of 312

2009–05–18 1:21 PM K:\CADD\16 Communications\WF–B10–RP112.dwg

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

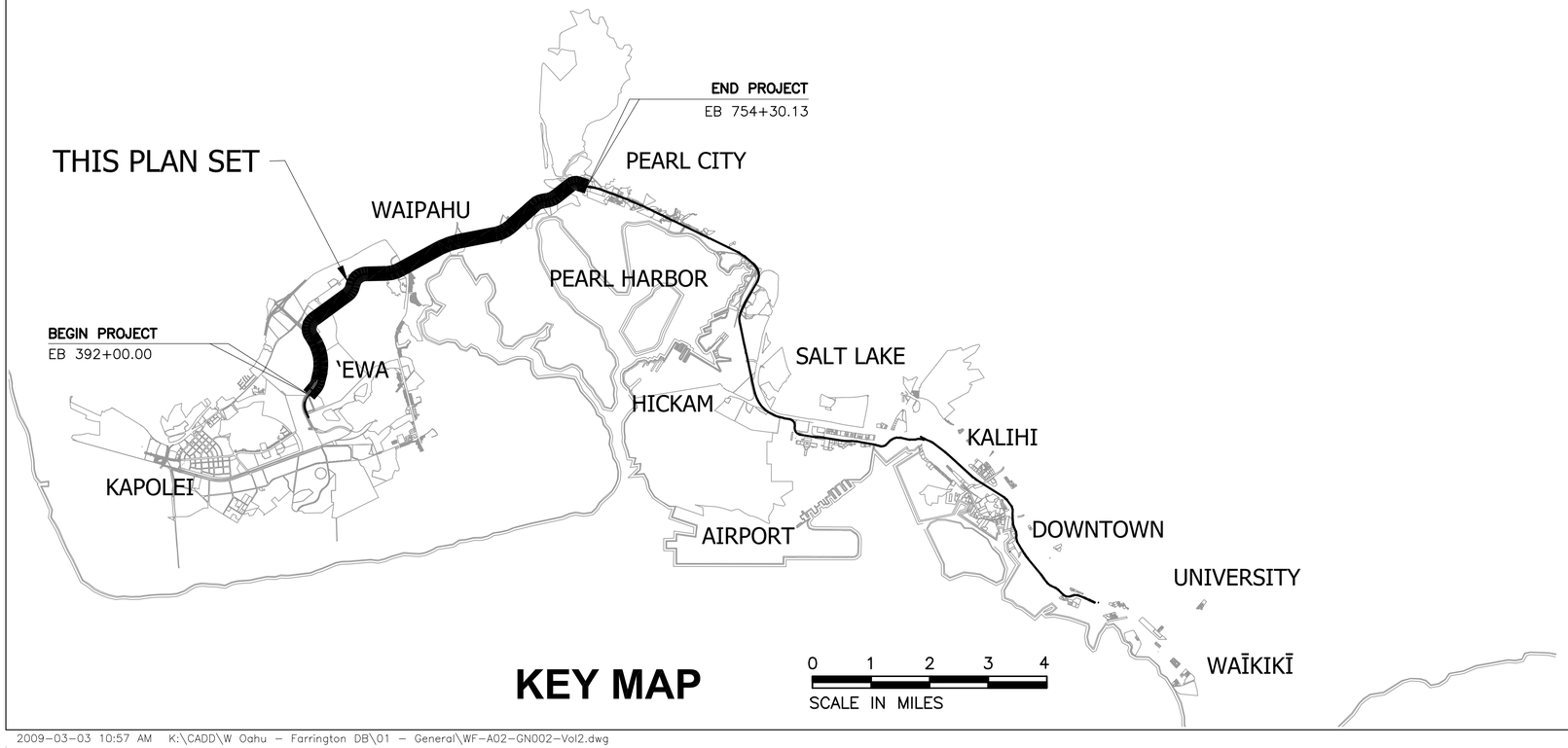
WEST O'AHU/FARRINGTON DESIGN-BUILD

VOLUME 2 - UTILITIES



City and County of Honolulu
Department of Transportation Services

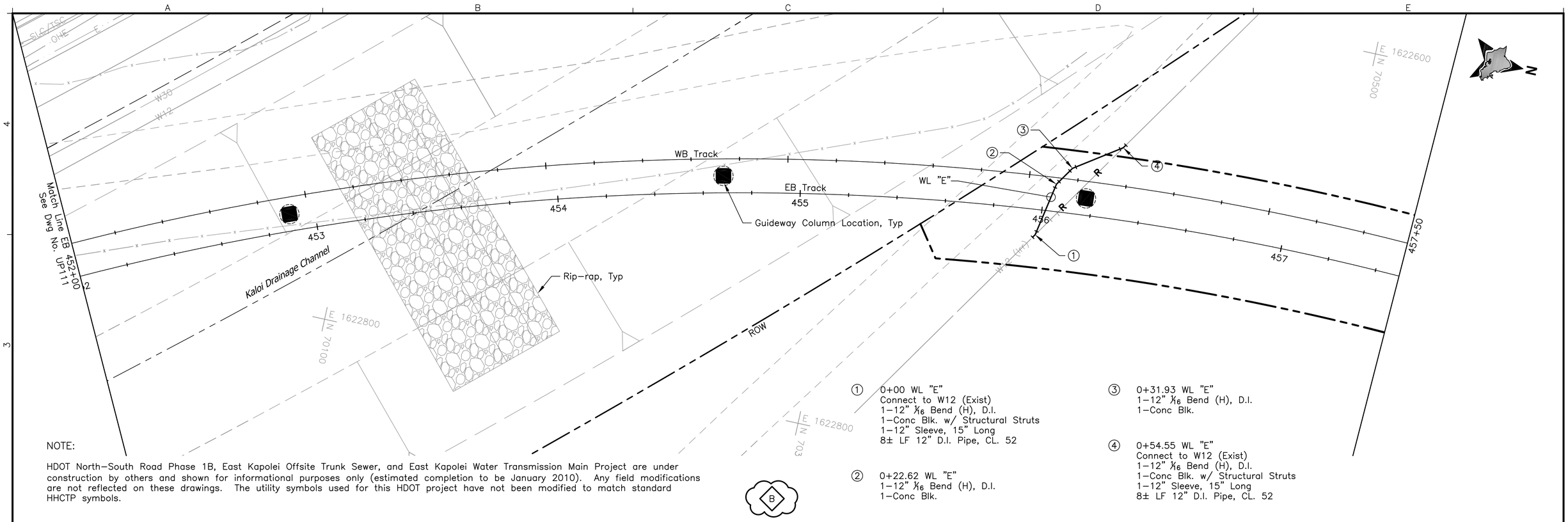
Rapid Transit Division



KEY MAP

03 APRIL 2009
ISSUED FOR BID
NOT FOR CONSTRUCTION

2009-03-03 10:57 AM K:\CADD\W Oahu - Farrington DB\01 - General\WF-A02-GN002-Vol2.dwg



NOTE:

HDOT North–South Road Phase 1B, East Kapolei Offsite Trunk Sewer, and East Kapolei Water Transmission Main Project are under construction by others and shown for informational purposes only (estimated completion to be January 2010). Any field modifications are not reflected on these drawings. The utility symbols used for this HDOT project have not been modified to match standard HHCTP symbols.

B

① 0+00 WL "E"
Connect to W12 (Exist)
1–12" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–12" Sleeve, 15" Long
8± LF 12" D.I. Pipe, CL. 52

② 0+22.62 WL "E"
1–12" ⅛ Bend (H), D.I.
1–Conc Blk.

③ 0+31.93 WL "E"
1–12" ⅛ Bend (H), D.I.
1–Conc Blk.

④ 0+54.55 WL "E"
Connect to W12 (Exist)
1–12" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–12" Sleeve, 15" Long
8± LF 12" D.I. Pipe, CL. 52

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

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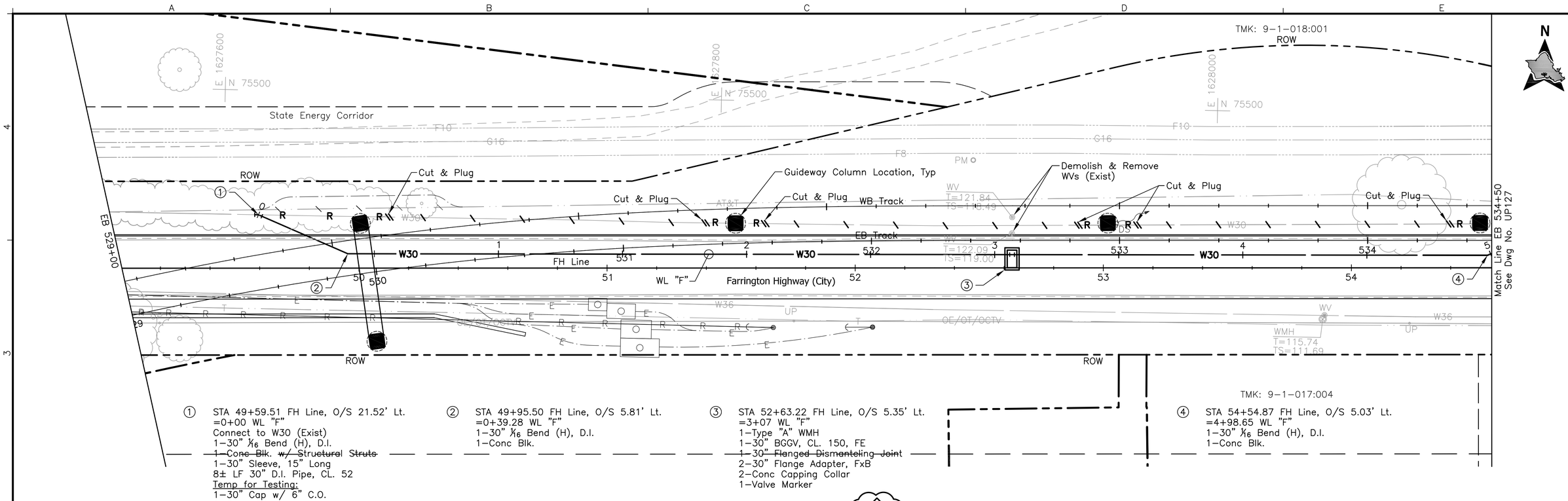
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 452+00 TO EB 457+50 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP112
Drawing No.: UP112 Rev. B
Scale: 1"=20'
Page No. 74 of 314

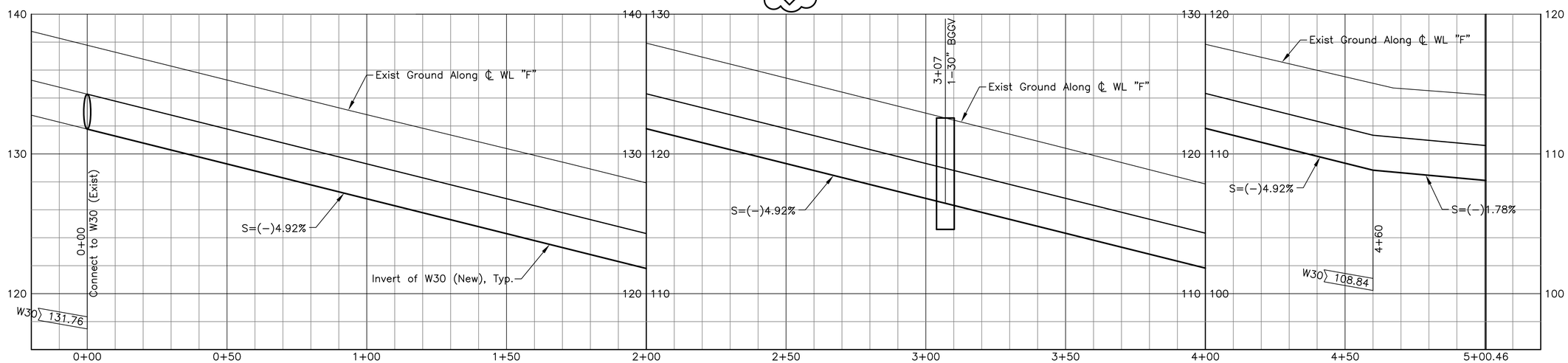


① STA 49+59.51 FH Line, O/S 21.52' Lt.
=0+00 WL "F"
Connect to W30 (Exist)
1-30" ⅛ Bend (H), D.I.
~~1-Conc Blk. w/ Structural Struts~~
1-30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1-30" Cap w/ 6" C.O.
1-Conc Blk.

② STA 49+95.50 FH Line, O/S 5.81' Lt.
=0+39.28 WL "F"
1-30" ⅛ Bend (H), D.I.
1-Conc Blk.

③ STA 52+63.22 FH Line, O/S 5.35' Lt.
=3+07 WL "F"
1-Type "A" WMH
1-30" BGGV, CL. 150, FE
~~1-30" Flanged Dismanteling Joint~~
2-30" Flange Adapter, FxB
2-Conc Capping Collar
1-Valve Marker

④ STA 54+54.87 FH Line, O/S 5.03' Lt.
=4+98.65 WL "F"
1-30" ⅛ Bend (H), D.I.
1-Conc Blk.



PROFILE: WL "F"

20' 0 20'
4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning - Engineering - Environmental Services - Photogrammetry - Surveying - Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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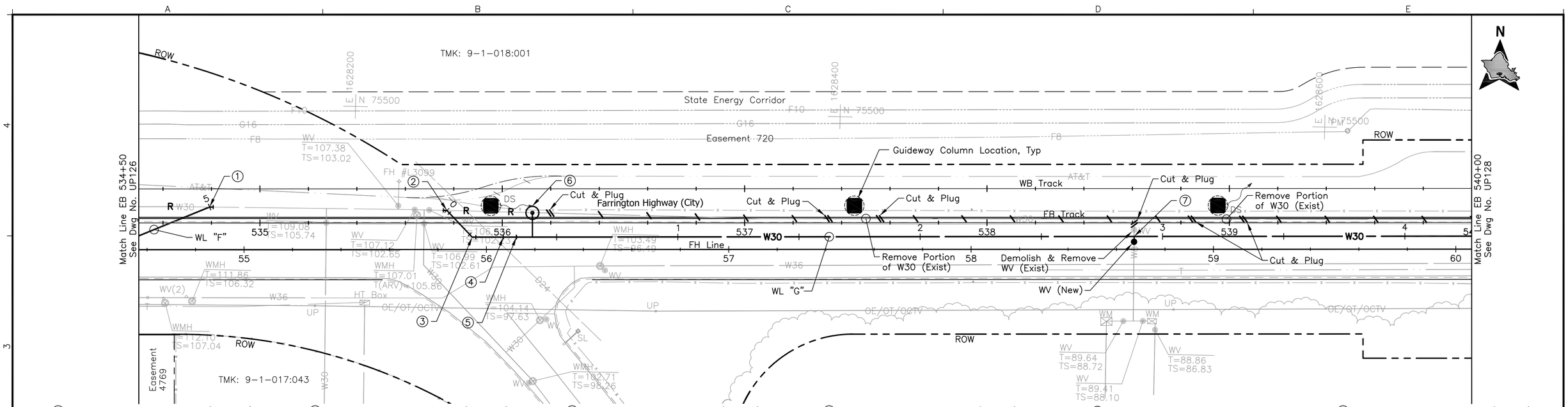
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 529+00 TO EB 534+50 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP126
Drawing No.: UP126 Rev.: B
Scale: 1"=20'
Page No.: 75 of 314



① STA 54+85.78 FH Line, O/S 17.56' Lt.
=5+32 WL "F"
Connect to W30 (Exist)
1–30" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 4" C.O.
1–Conc Blk.

② STA 55+83.71 FH Line, O/S 16.11' Lt.
=0+00 WL "G"
Connect to W30 (Exist)
1–30" ⅛ Bend (H & TV), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 4" C.O.
1–Conc Blk.

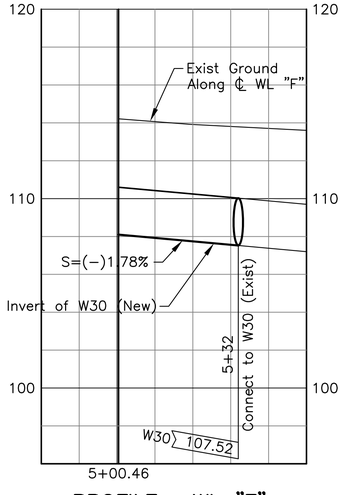
③ STA 55+94.15 FH Line, O/S 5.11' Lt.
=0+15.17 WL "G"
1–30" ⅛ Bend (H & BV), D.I.
1–Conc Blk.

④ STA 56+06.98 FH Line, O/S 5.12' Lt.
=0+28 WL "G"
1–30" ⅛ Bend (BV), D.I.
1–Conc Blk.

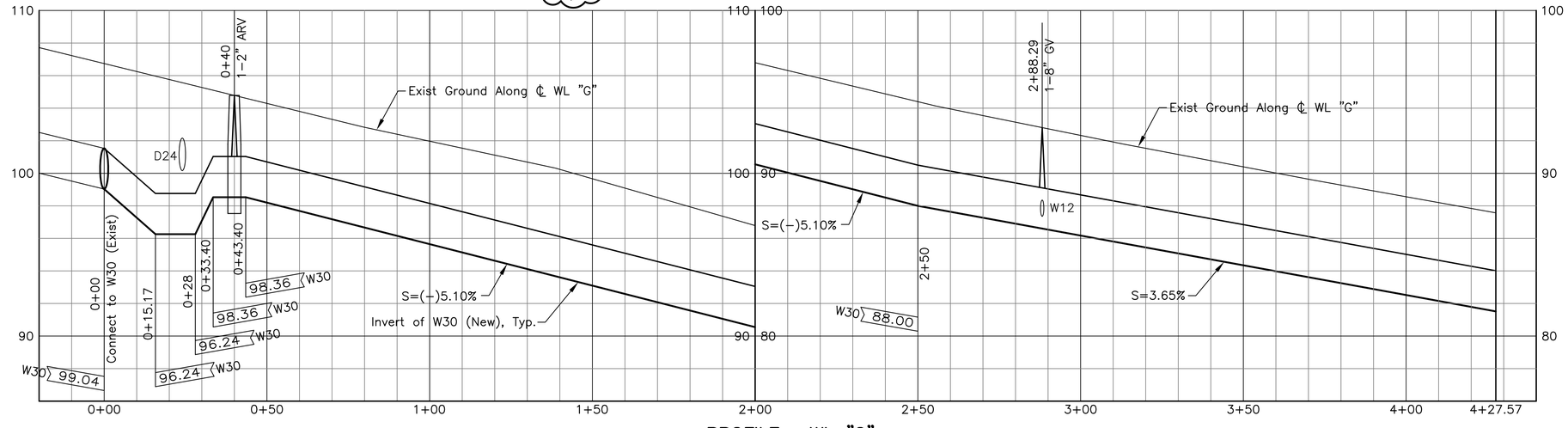
⑤ STA 56+12.38 FH Line, O/S 5.12' Lt.
=0+33.40 WL "G"
1–30" ⅛ Bend (TV), D.I.
1–Conc Blk.

⑥ STA 56+18.94 FH Line, O/S 5.16' Lt.
=0+40 WL "G"
(O/S=10.0')
1–2" ARV
1–Type "D" Offset Manhole
1–Valve Marker

⑦ STA 58+67.27 FH Line, O/S 5.28' Lt.
=2+88.29 WL "G"
Connect to W8 (Exist)
1–30"x12" Tee
1–12"x8" Reducer
1–Conc Blk.
1–8" GV, 150#
1–Valve Box



PROFILE: WL "F"



PROFILE: WL "G"

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05–22–09	Added Profiles and Misc. Revision
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

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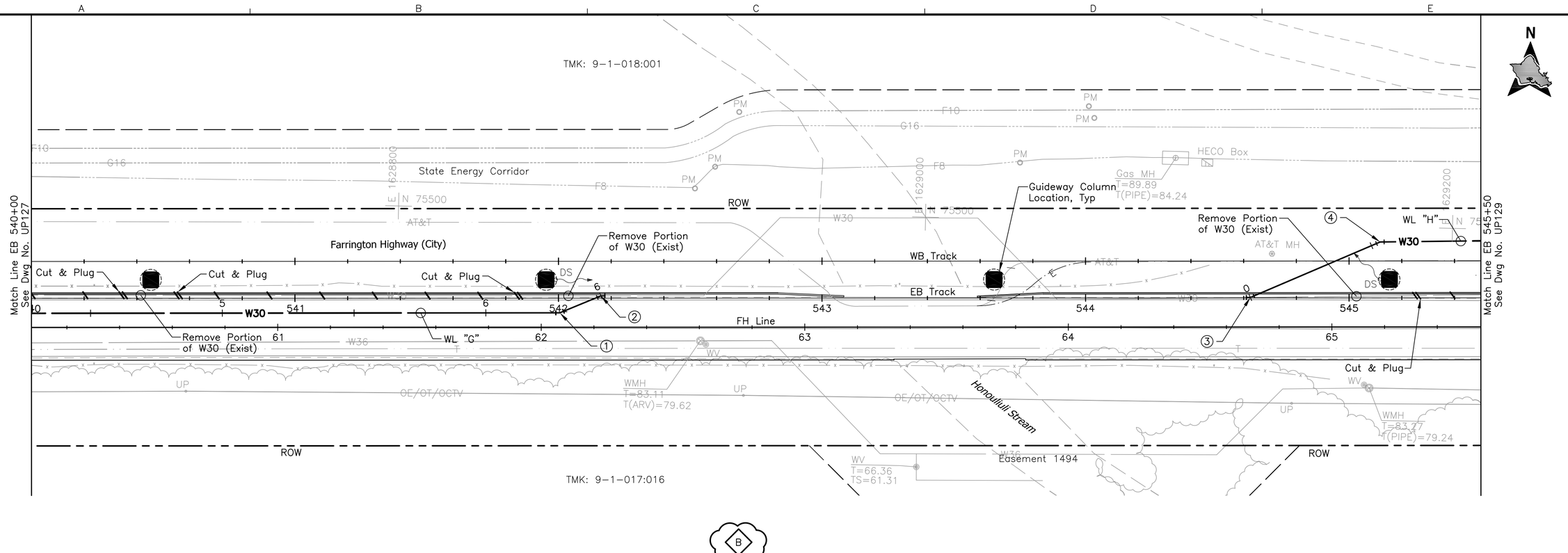
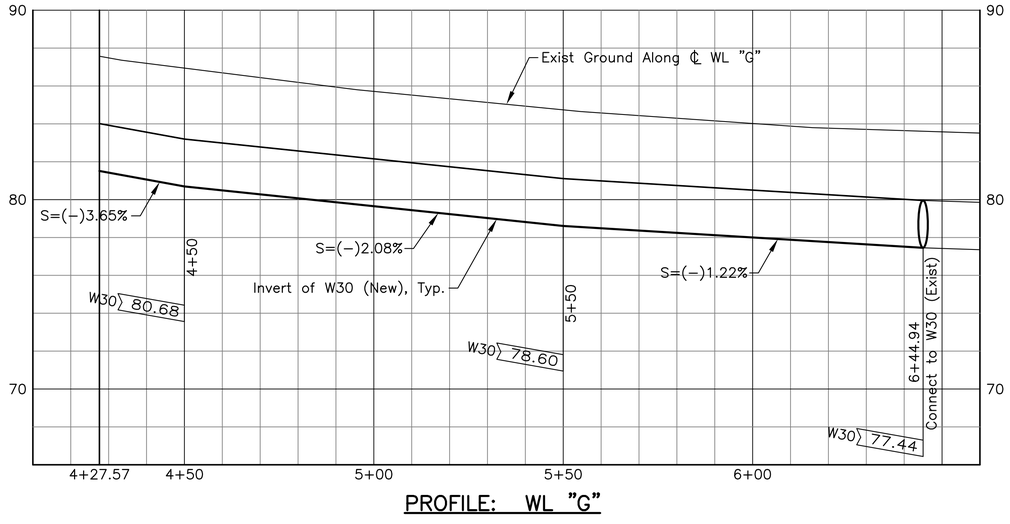
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 534+50 TO EB 540+00 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP127
Drawing No: UP127 Rev. B
Scale: 1"=20'
Page No. 76 of 314





PROFILE: WL "G"

B

① STA 62+07.05 FH Line, O/S 5.50' Lt.
=6+28.08 WL "G"
1−30" ⅛ Bend (H), D.I.
1−Conc Blk.

② STA 62+22.64 FH Line, O/S 11.93' Lt.
=6+44.94 WL "G"
Connect to W30 (Exist)
1−30" ⅛ Bend (H), D.I.
1−Conc Blk. w/ Structural Struts
1−30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1−30" Cap w/ 6" C.O.
1−Conc Blk.

③ STA 64+69.06 FH Line, O/S 11.21' Lt.
=0+00 WL "H"
Connect to W30 (Exist)
1−30" ⅛ Bend (H), D.I.
1−Conc Blk. w/ Structural Struts
1−30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1−30" Cap w/ 6" C.O.
1−Conc Blk.

④ STA 65+18.34 FH Line, O/S 32.25' Lt.
=0+53.59 WL "H"
1−30" ⅛ Bend (H), D.I.
1−Conc Blk.

20' 0 20'
4' 0 4'

Rev	By	Date	Description
B	JY	05−22−09	Added Profiles and Misc. Revisions
A	JY	04−03−09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04−03−09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 − Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning − Engineering − Environmental Services − Photogrammetry − Surveying − Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819−3470

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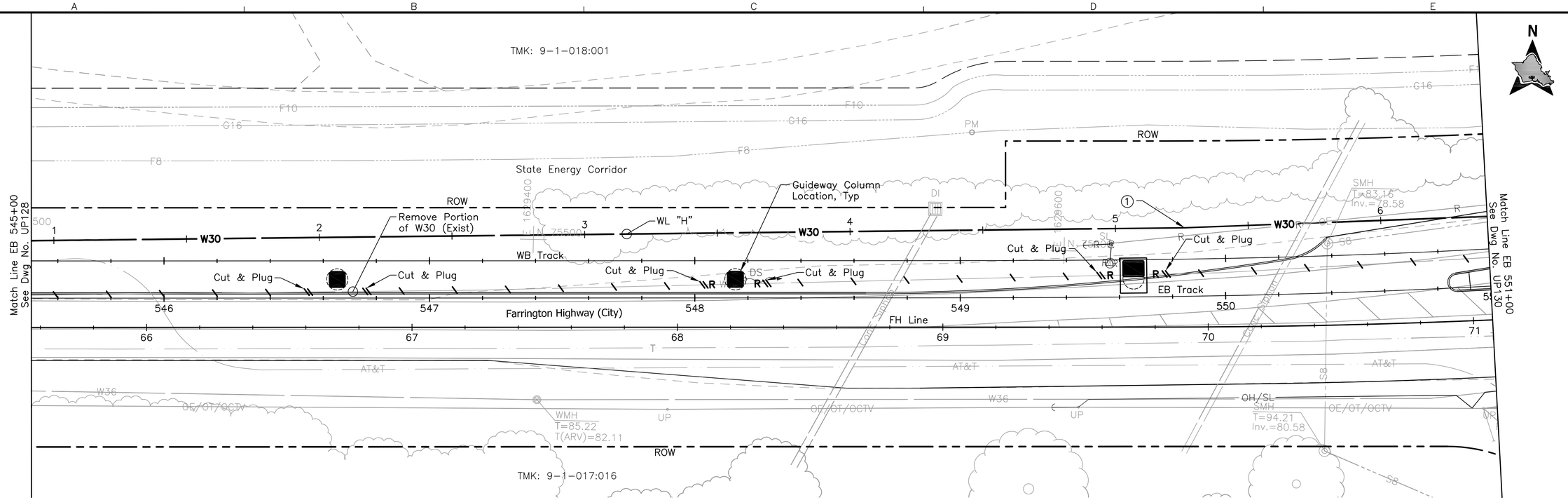
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 540+00 TO EB 545+50 SHEET 1 OF 1

Contract No.: DB−1200
CADD File: WF−D03−UP128
Drawing No.: UP128 Rev.: B
Scale: 1"=20'
Page No.: 77 of 314



① STA 69+91.19 FH Line, O/S 37.36' Lt.
=5+26.04 WL "H"
Deflect W30 1.5'

B

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

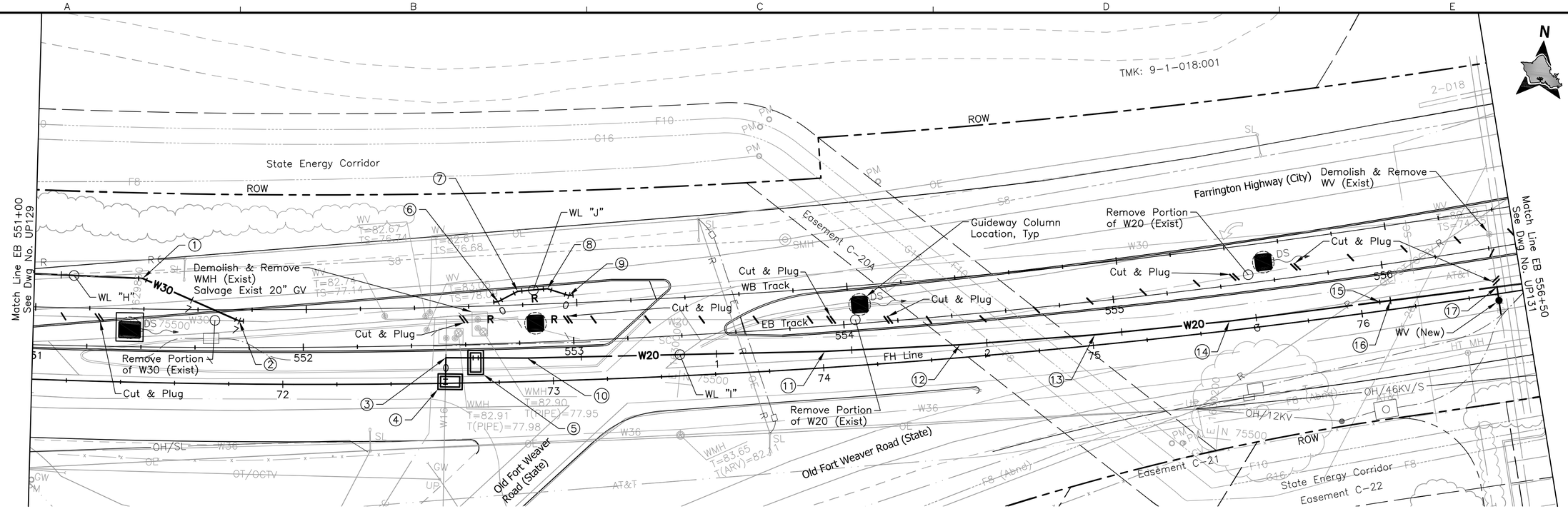
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 545+50 TO EB 551+00 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP129
Drawing No.: UP129 Rev.: B
Scale: 1"=20'
Page No.: 78 of 314



① STA 71+47.36 FH Line, O/S 38.45' Lt.
=6+80.13 WL "H"
1–30" ⅛ Bend (H), D.I.
1–Conc Blk.

② STA 71+83.68 FH Line, O/S 23.28' Lt.
=7+19.13 WL "H"
Connect to W30 (Exist)
1–30" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 6" C.O.
1–Conc Blk.

③ STA 72+60.43 FH Line, O/S 9.46' Lt.
=0+00 WL "I"
Connect to W16 (Exist)
1–16"x20" Tee
1–Conc Blk.

④ STA 72+60 FH Line, O/S 0.46' Lt.
1–Type "A" WMH
1–16" BGGV, CL. 150, FE
1–16" Flanged Dismanteling Joint
2–16" Flange Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

⑤ STA 72+71.46 FH Line, O/S 9.22' Lt.
=0+11 WL "I"
1–Type "A" WMH
1–20" BGGV, CL. 150, FE
1–20" Flanged Dismanteling Joint
2–20" Flange Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

⑥ STA 72+80.16 FH Line, O/S 29.78' Lt.
=0+00 WL "J"
Connect to W30 (Exist)
1–30" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52

⑦ STA 72+87.71 FH Line, O/S 33.44' Lt.
=0+08.31 WL "J"
1–30" ⅛ Bend (H), D.I.
1–Conc Blk.

⑧ STA 72+98.82 FH Line, O/S 34.08' Lt.
=0+19.31 WL "J"
1–30" ⅛ Bend (H), D.I.
1–Conc Blk.

⑨ STA 73+06.76 FH Line, O/S 31.33' Lt.
=0+27.63 WL "J"
Connect to W30 (Exist)
1–30" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52

⑩ STA 72+90.51 FH Line, O/S 8.69' Lt.
=0+30 WL "I"
Deflect W20 1.5°

⑪ STA 74+00.77 FH Line, O/S 6.04' Lt.
=1+40 WL "I"
Deflect W20 1.5°

⑫ STA 74+50.85 FH Line, O/S 4.74' Lt.
=1+90 WL "I"
Deflect W20 1.5°

⑬ STA 75+00.92 FH Line, O/S 3.88' Lt.
=2+40 WL "I"
Deflect W20 1.5°

⑭ STA 75+50.98 FH Line, O/S 3.46' Lt.
=2+90 WL "I"
Deflect W20 1.5°

⑮ STA 76+07.05 FH Line, O/S 3.41' Lt.
=3+46 WL "I"
1–20" ⅛ Bend (TV), D.I.
1–Conc Blk.

⑯ STA 76+11.05 FH Line, O/S 3.36' Lt.
=3+50 WL "I"
1–20" ⅛ Bend (BV), D.I.
1–Conc Blk.

⑰ STA 76+50.77 FH Line, O/S 2.61' Lt.
=3+89.69 WL "I"
Connect to W12 (Exist)
1–20"x12" Tee
1–Conc Blk.
1–12" GV, 150#
1–Valve Box

20' 0 20'

4' 0 4'

NOTE:

For WL "I" Profile, see Drawing No. UP130A.

Rev	By	Date	Description
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 551+00 TO EB 556+50 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP130
Drawing No.: UP130 Rev.: B
Scale: 1"=20'
Page No.: 79 of 314

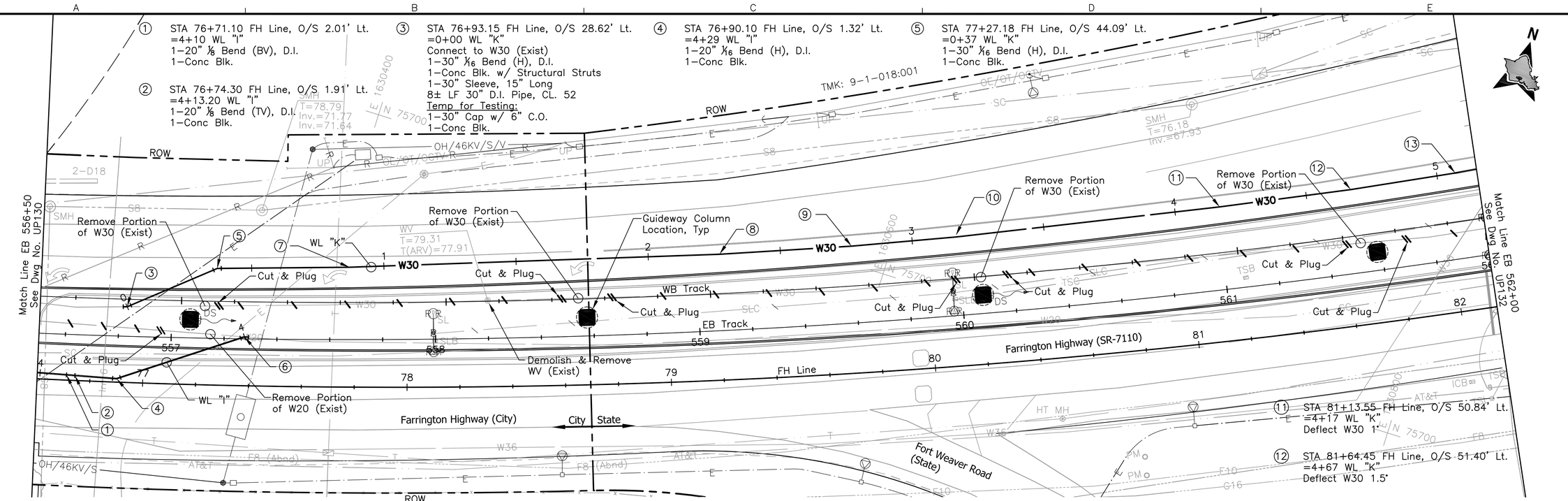
① STA 76+71.10 FH Line, O/S 2.01' Lt.
=4+10 WL "I"
1–20" ⅛ Bend (BV), D.I.
1–Conc Blk.

② STA 76+74.30 FH Line, O/S 1.91' Lt.
=4+13.20 WL "I"
1–20" ⅛ Bend (TV), D.I.
1–Conc Blk.

③ STA 76+93.15 FH Line, O/S 28.62' Lt.
=0+00 WL "K"
Connect to W30 (Exist)
1–30" ¼₆ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 6" C.O.
1–Conc Blk.

④ STA 76+90.10 FH Line, O/S 1.32' Lt.
=4+29 WL "I"
1–20" ¼₆ Bend (H), D.I.
1–Conc Blk.

⑤ STA 77+27.18 FH Line, O/S 44.09' Lt.
=0+37 WL "K"
1–30" ¼₆ Bend (H), D.I.
1–Conc Blk.



⑥ STA 77+38.11 FH Line, O/S 18.48' Lt.
=4+79.84 WL "I"
Connect to W20 (Exist)
1–20" ¼₆ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–20" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–20" Cap w/ 4" C.O.
1–Conc Blk.

⑦ STA 77+77.96 FH Line, O/S 45.29' Lt.
=0+87 WL "K"
Deflect W30 1.5°

⑧ STA 79+20.27 FH Line, O/S 47.59' Lt.
=2+27 WL "K"
Deflect W30 1.5°

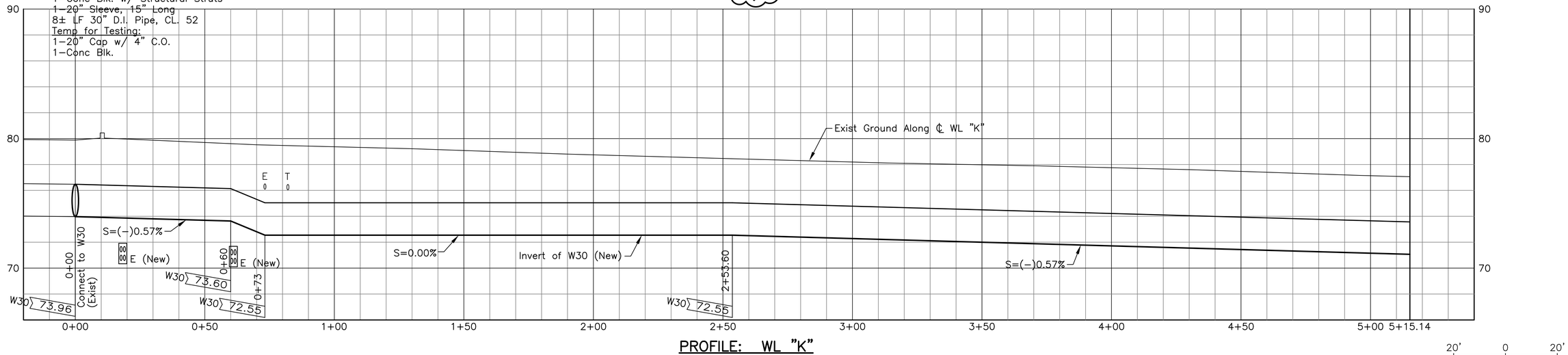
⑨ STA 79+71.11 FH Line, O/S 48.03' Lt.
=2+77 WL "K"
Deflect W30 1.5°

⑩ STA 80+11.79 FH Line, O/S 48.80' Lt.
=3+17 WL "K"
Deflect W30 1.5°

⑪ STA 81+13.55 FH Line, O/S 50.84' Lt.
=4+17 WL "K"
Deflect W30 1.5°

⑫ STA 81+64.45 FH Line, O/S 51.40' Lt.
=4+67 WL "K"
Deflect W30 1.5°

⑬ STA 82+05.18 FH Line, O/S 52.25' Lt.
=5+07 WL "K"
Deflect W30 1.5°



PROFILE: WL "K"

20' 0 20'
4' 0 4'

Rev	By	Date	Description
B	JY	05–22–09	Added Profile and Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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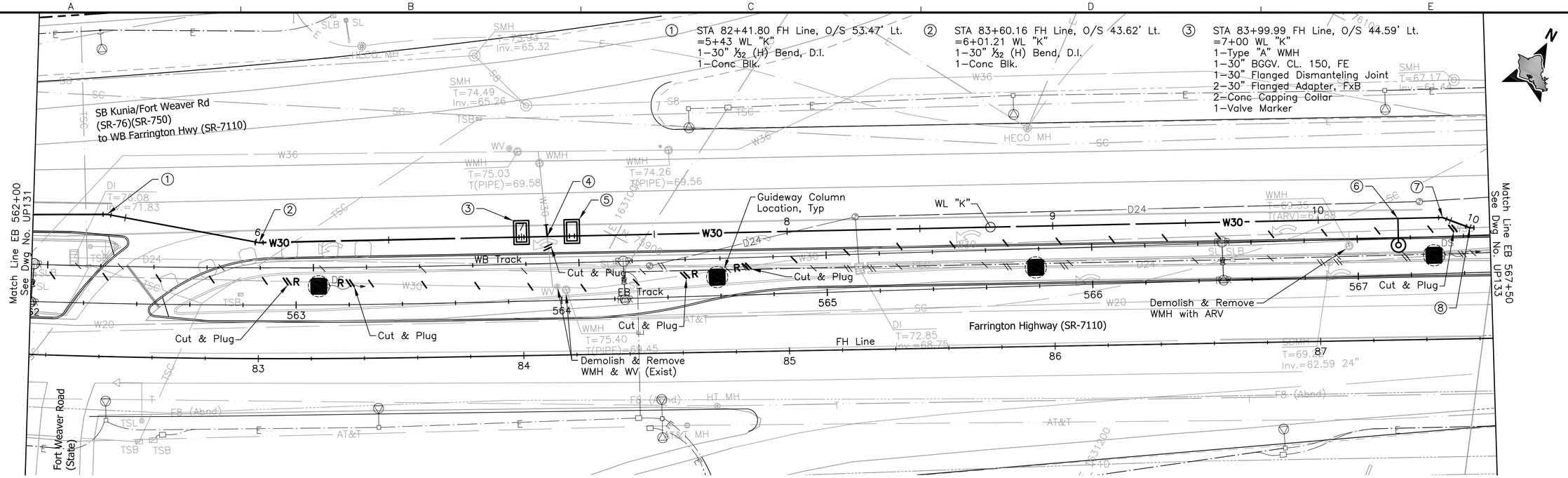
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 556+50 TO EB 562+00 SHEET 1 OF 1

Contract No.: SB
CADD File: WF–D03–UP131
Drawing No.: UP131 Rev.: B
Scale: 1"=20'
Page No.: 81 of 314



① STA 82+41.80 FH Line, O/S 53.47' Lt.
=5+43 WL "K"
1–30" ½₂ (H) Bend, D.I.
1–Conc Blk.

② STA 83+60.16 FH Line, O/S 43.62' Lt.
=6+01.21 WL "K"
1–30" ½₂ (H) Bend, D.I.
1–Conc Blk.

③ STA 83+99.99 FH Line, O/S 44.59' Lt.
=7+00 WL "K"
1–Type "A" WMH
1–30" BGGV. CL. 150, FE
1–30" Flanged Dismanteling Joint
2–30" Flanged Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

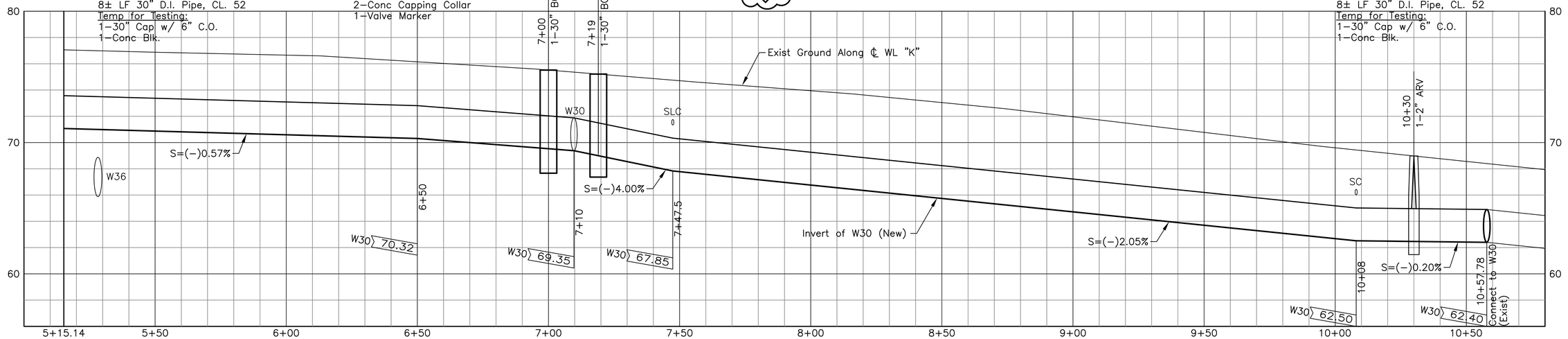
④ STA 84+09.60 FH Line, O/S 44.62' Lt.
=7+09.71 WL "K"
Connect to W30 (Exist)
1–30" Tee
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 6" C.O.
1–Conc Blk.

⑤ STA 84+18.89 FH Line, O/S 44.65' Lt.
=7+19 WL "K"
1–Type "A" WMH
1–30" BGGV. CL. 150, FE
1–30" Flanged Dismanteling Joint
2–30" Flanged Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

⑥ STA 87+29.89 FH Line, O/S 45.67' Lt.
=10+30 WL "K"
(O/S=10.0')
1–2" ARV
1–Type "D" Offset Manhole
1–Valve Marker

⑦ STA 87+46.72 FH Line, O/S 45.73' Lt.
=10+46.93 WL "K"
1–30" ⅛ Bend (H), D.I.
1–Conc Blk.

⑧ STA 87+56.94 FH Line, O/S 41.67' Lt.
=10+57.78 WL "K"
Connect to W30 (Exist)
1–30" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–30" Sleeve, 15" Long
8± LF 30" D.I. Pipe, CL. 52
Temp for Testing:
1–30" Cap w/ 6" C.O.
1–Conc Blk.



PROFILE: WL "K"

20' 0 20'

4' 0 4'

NOTE:

For drainage relocations, see Drawing No. UP132A.

Rev	By	Date	Description
B	JY	05–22–09	Added Profile and Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
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WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 562+00 TO EB 567+50 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP132
Drawing No.: UP132 Rev.: B
Scale: 1"=20'
Page No.: 82 of 314

SB Kunia/Fort Weaver Road (SR-76)(SR-750)
to WB Farrington Highway (SR-7110)

EB 562+00

DI
T=76.08
Inv.=71.83

Curb per Roadway Construction Plans

Existing Curb

24" RCP CL III
L=80.00', S=1.26%

Cut & Plug

Existing DI to Remain

① SDMH-B2
T=73.52
Inv.=68.56 (24" in)
Inv.=62.95 (24" in/out)

24" RCP CL III
L=18.00', S=32.22%

③ Connect to Existing DI
Inv. 68.75

24" RCP CL III
L=212.00', S=3.00%

① SDMH-B3
T=68.75
Inv.=56.59 (24" in/out)

Match Line EB 567+50
See Dwg No. UP133A

WB Track

EB Track

563 564 565 566 567

Cut & Plug

D24 to be abandoned in place

Remove D24
L=20.00'

SDMH to be abandoned in place

Remove D24
L=30.00'

Curb per Roadway Construction Plans

Existing Curb

FH Line

83 84 85 86 87

Farrington Highway (SR-7110)

① SDMH-B1
T=74.90
Inv.=69.57 (24" out)

DI
T=72.85
Inv.=68.75

SDMH
T=69.
Inv.=62.59 24"

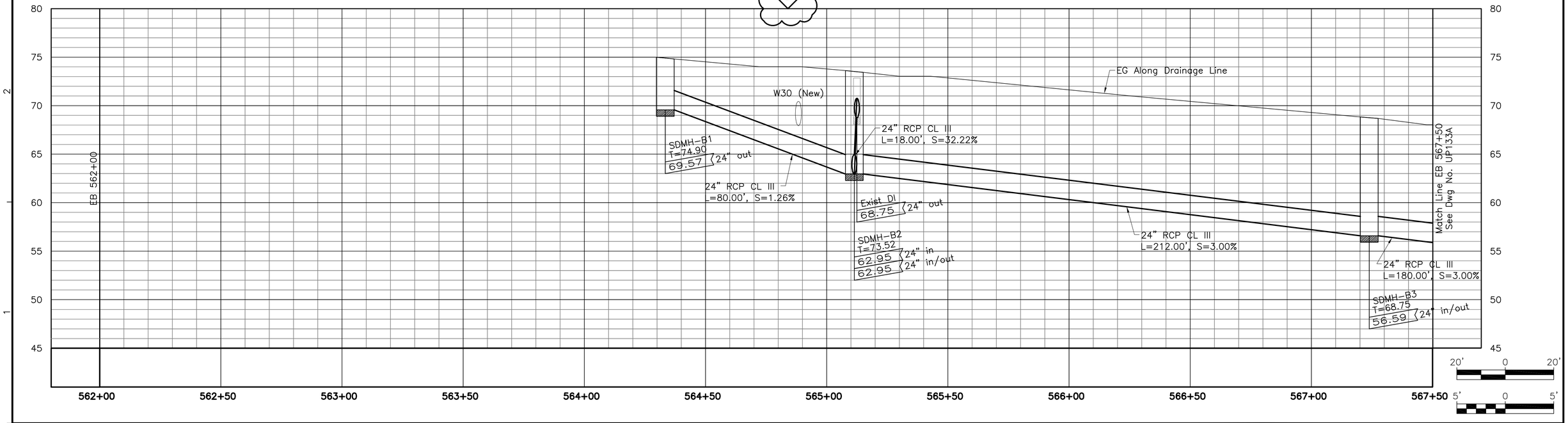
SB Kunia/Fort Weaver Road (SR-76)(SR-750)
to EB Farrington Highway (SR-7101)

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP132.



Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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Honolulu, HI 96813 USA
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www.lyonassociates.com

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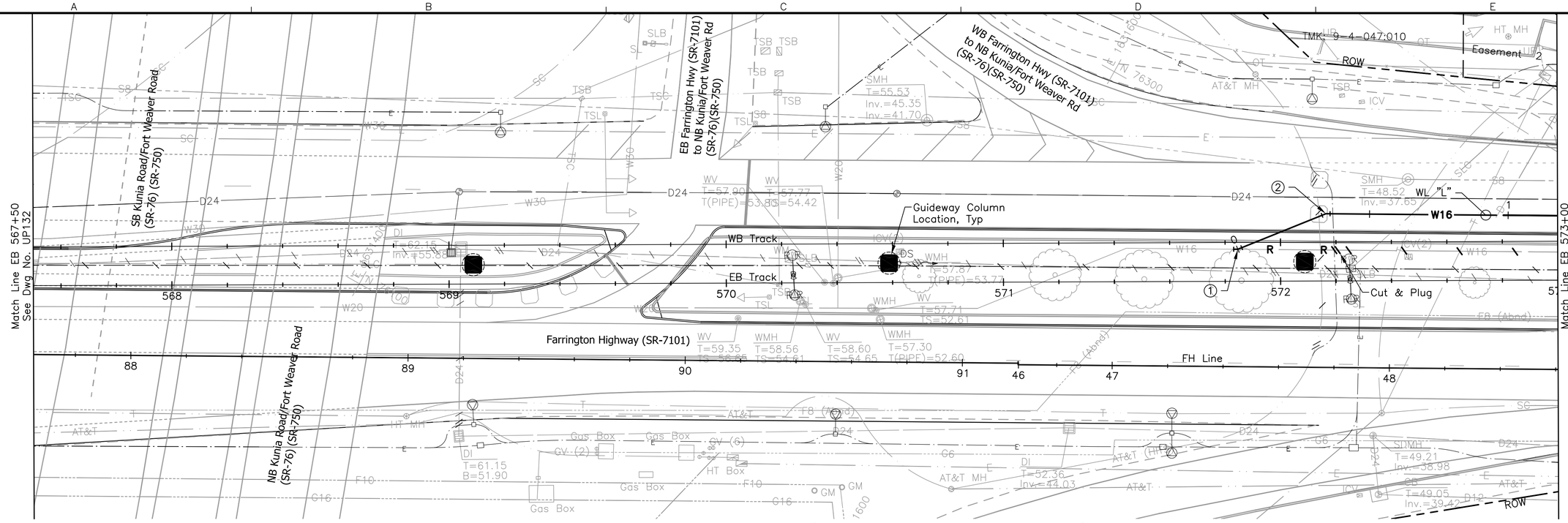
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

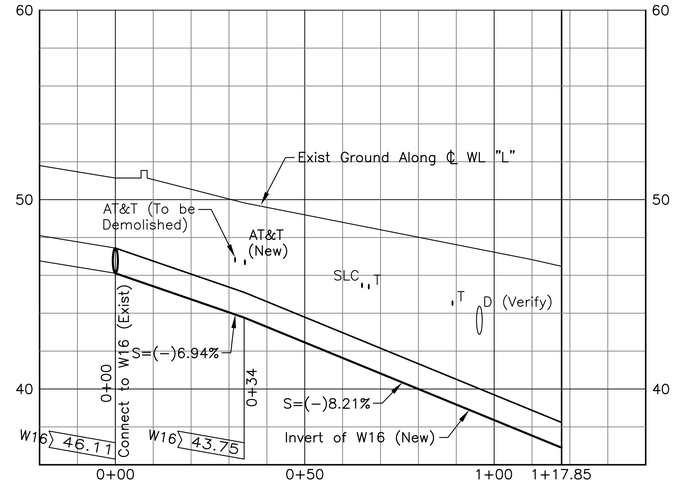
EB 562+00 TO EB 567+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP132A
Drawing No.: UP132A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 83 of 314



① Sta 47+44.97 FH Line, O/S 42.36' Lt.
=0+00 WL "L"
Connect to W16 (Exist)
1–16" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–16" Sleeve, 15" Long
8± LF 16" D.I. Pipe, CL. 52
Temp for Testing:
1–16" Cap w/ 4" C.O.
1–Conc Blk.

② STA 47+76.62 FH Line, O/S 55.47' Lt.
=0+34.25 WL "L"
1–16" ⅛ Bend (H), D.I.
1–Conc Blk.



PROFILE: WL "L"

NOTE:

For drainage relocations, see Drawing No. UP133A.

Rev	By	Date	Description
B	JY	05–22–09	Added Profile and Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
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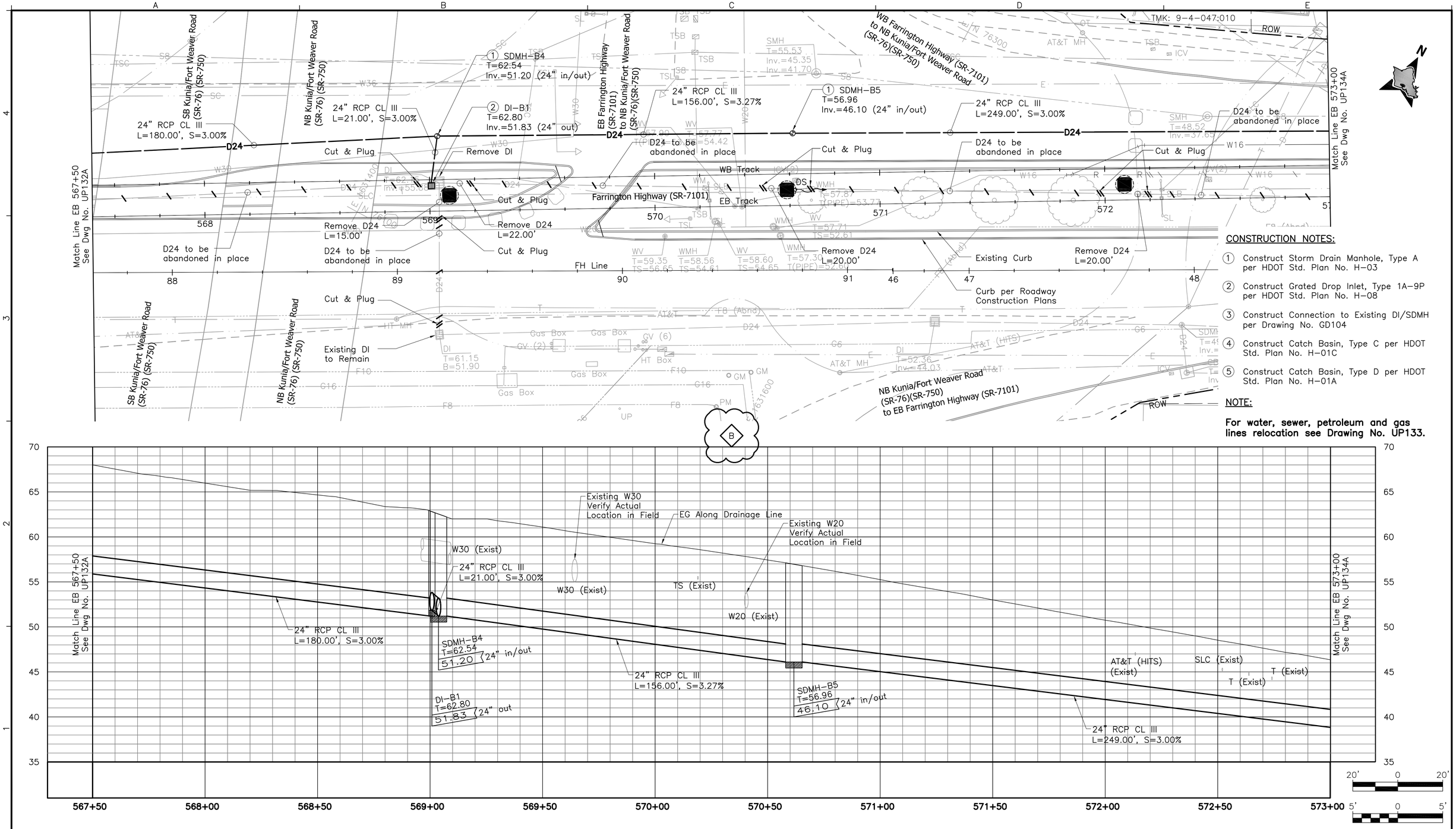
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 567+50 TO EB 573+00 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP133
Drawing No.: UP133 Rev.: B
Scale: 1"=20'
Page No.: 84 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP133.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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www.lyonassociates.com

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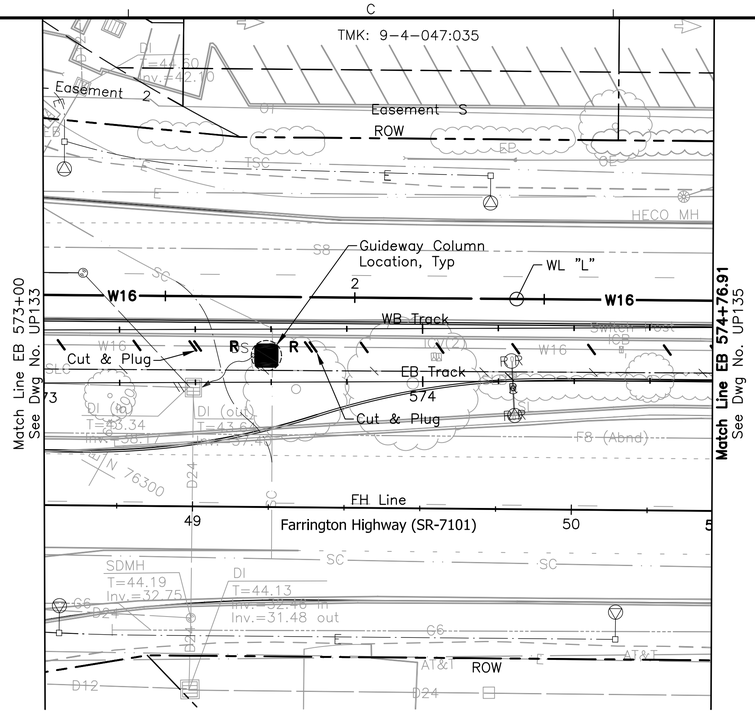
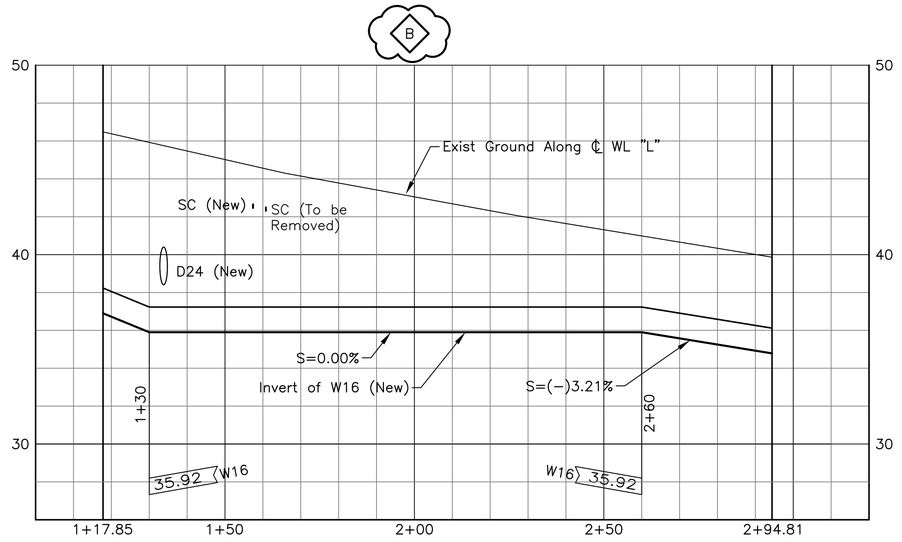
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 567+50 TO EB 573+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP133A
Drawing No.: UP133A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 85 of 314





PROFILE: WL "L"

NOTE:

For drainage relocations, see Drawing No. UP134A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
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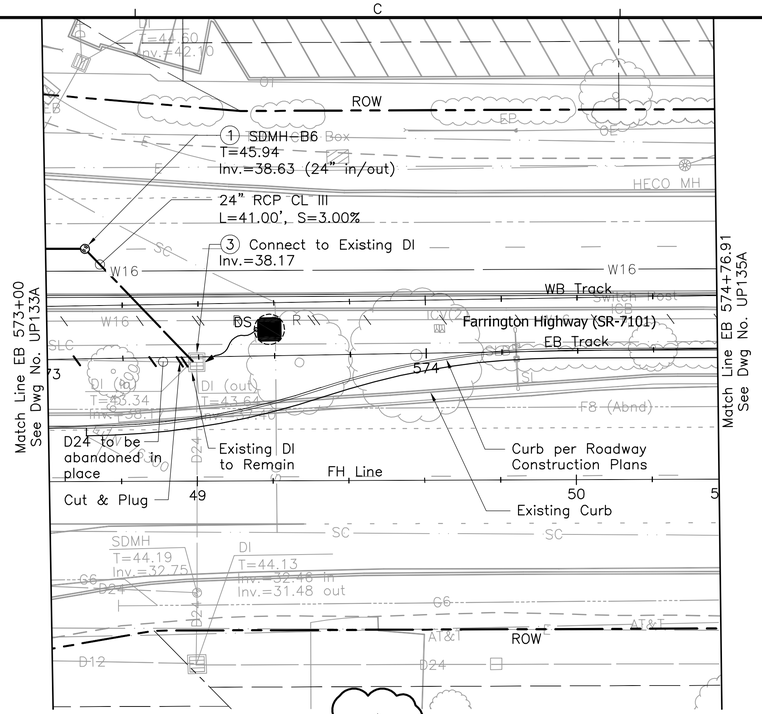
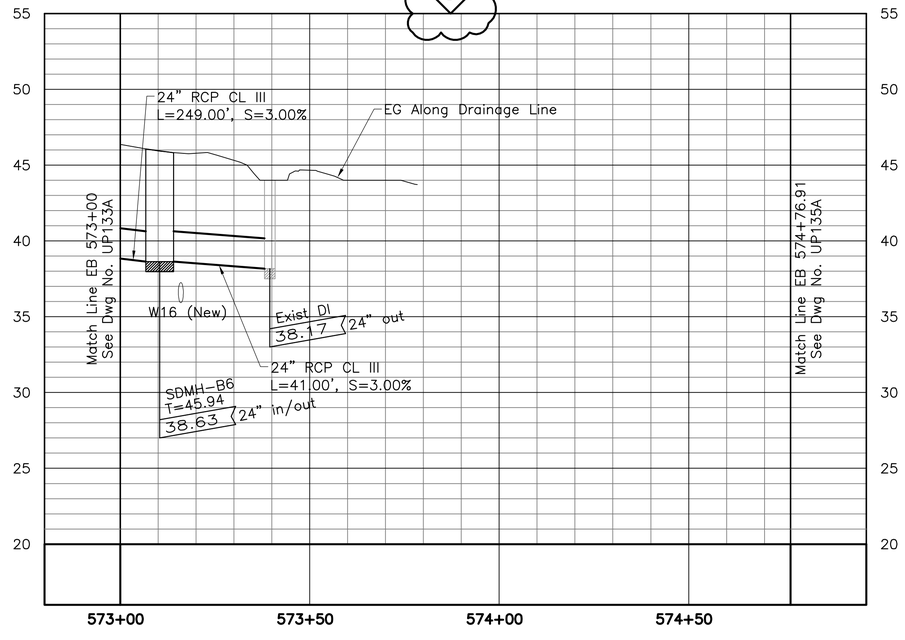
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 573+00 TO EB 574+76.91 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP134
Drawing No.: UP134 Rev.: B
Scale: 1"=20'
Page No.: 86 of 314





CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP134.

20' 0 20'

5' 0 5'

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT
841 Bishop Street, Suite 2006
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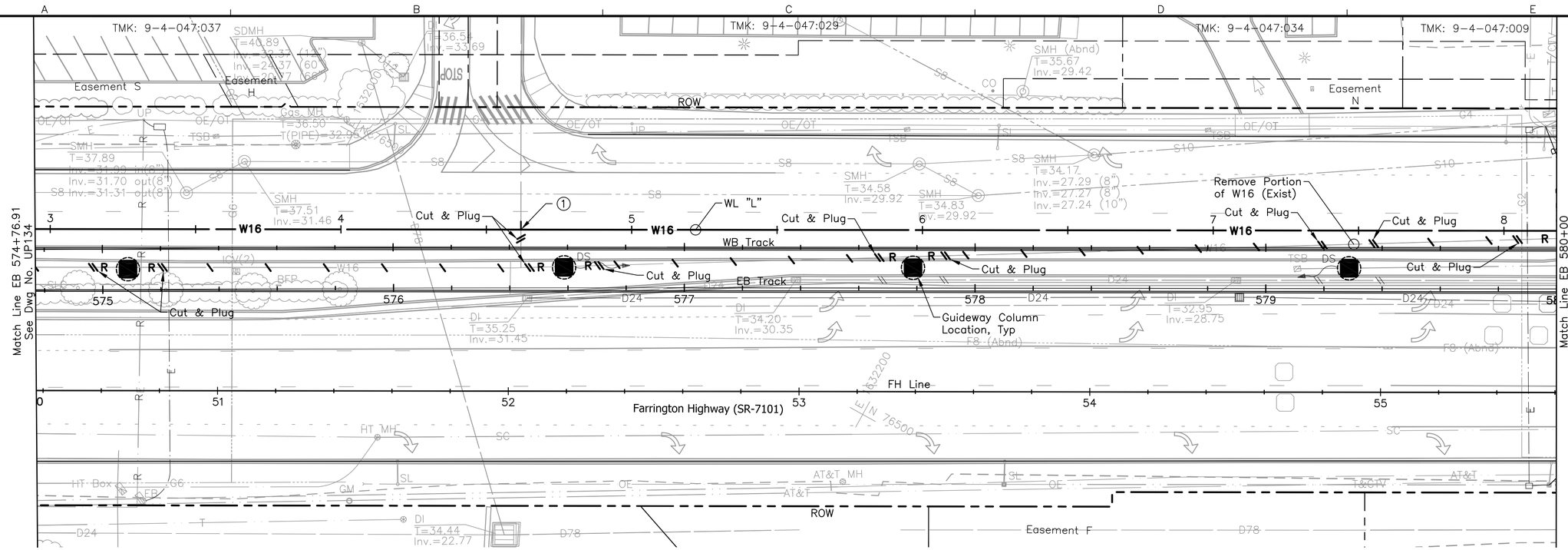
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

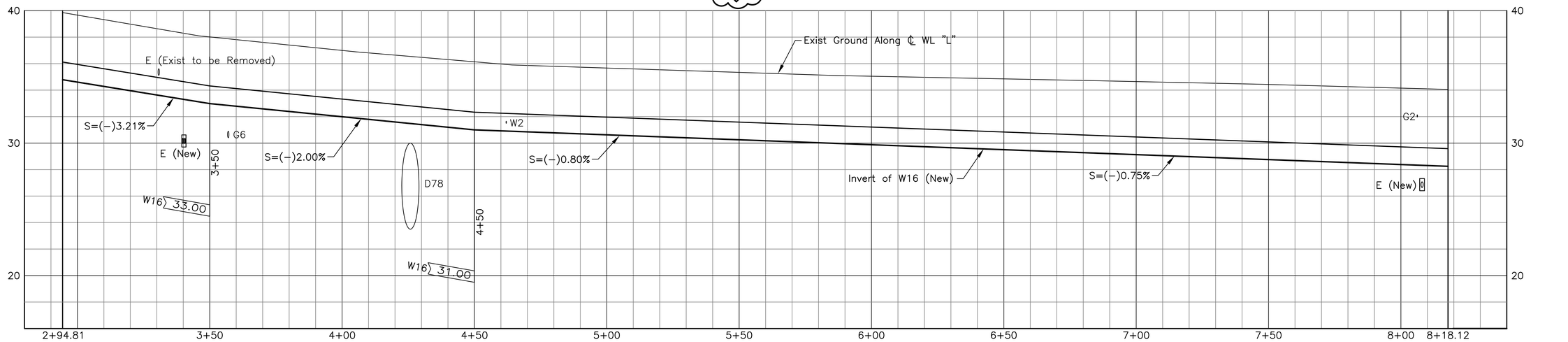
UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 573+00 TO EB 574+76.91 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP134A
Drawing No.: UP134A Rev.: B
Scale: 1"=20' H, 1"=5' V



① STA 52+04.27 FH Line, O/S 55.51' Lt.
=4+61.91 WL "L"
Connect to W2 (Exist)



PROFILE: WL "L"

NOTE:

For drainage relocations, see Drawing No. UP135A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

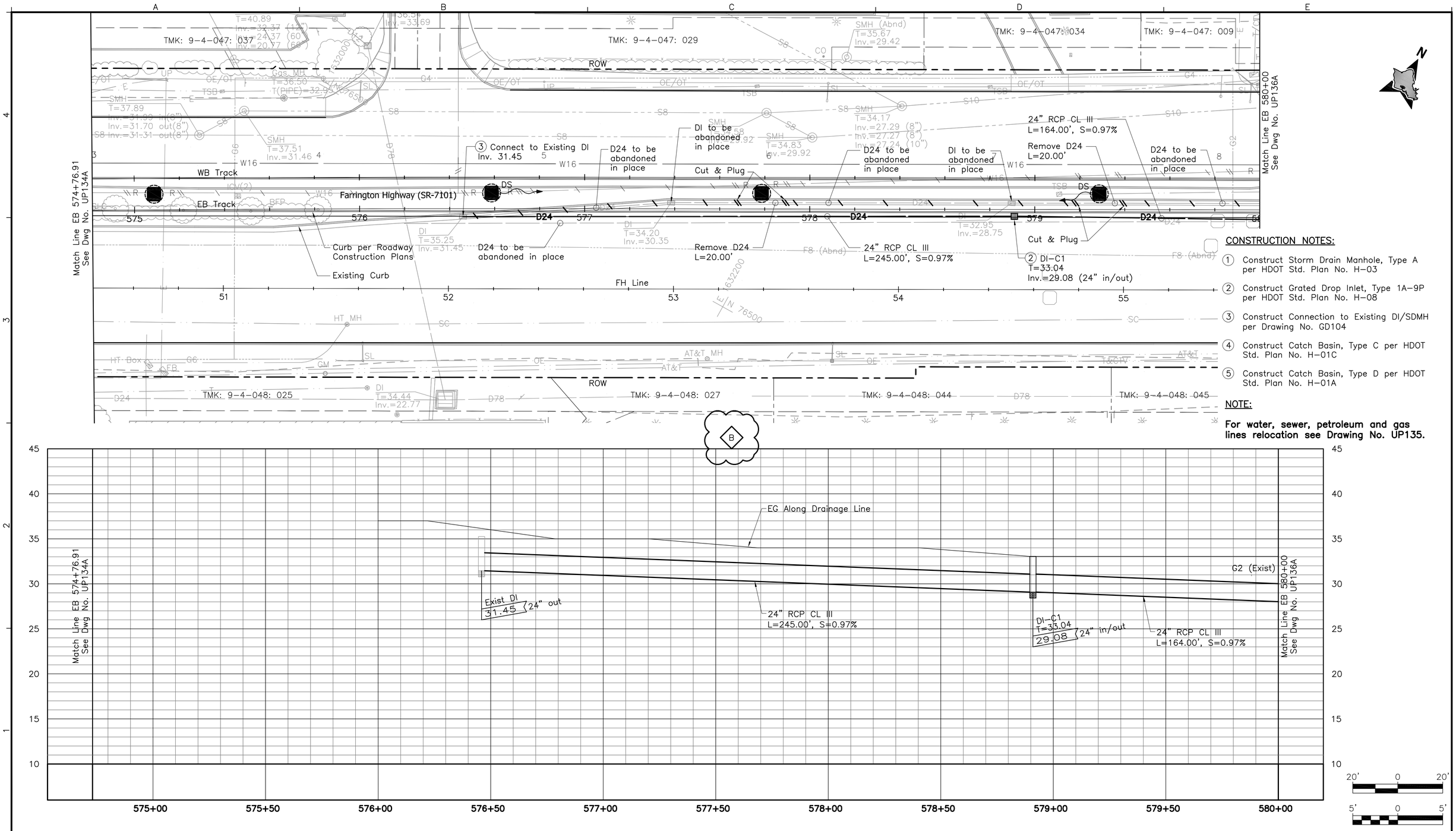
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATIONS
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 574+76.91 TO EB 580+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP135
Drawing No.: UP135 Rev. B
Scale: 1"=20'
Page No. 88 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP135.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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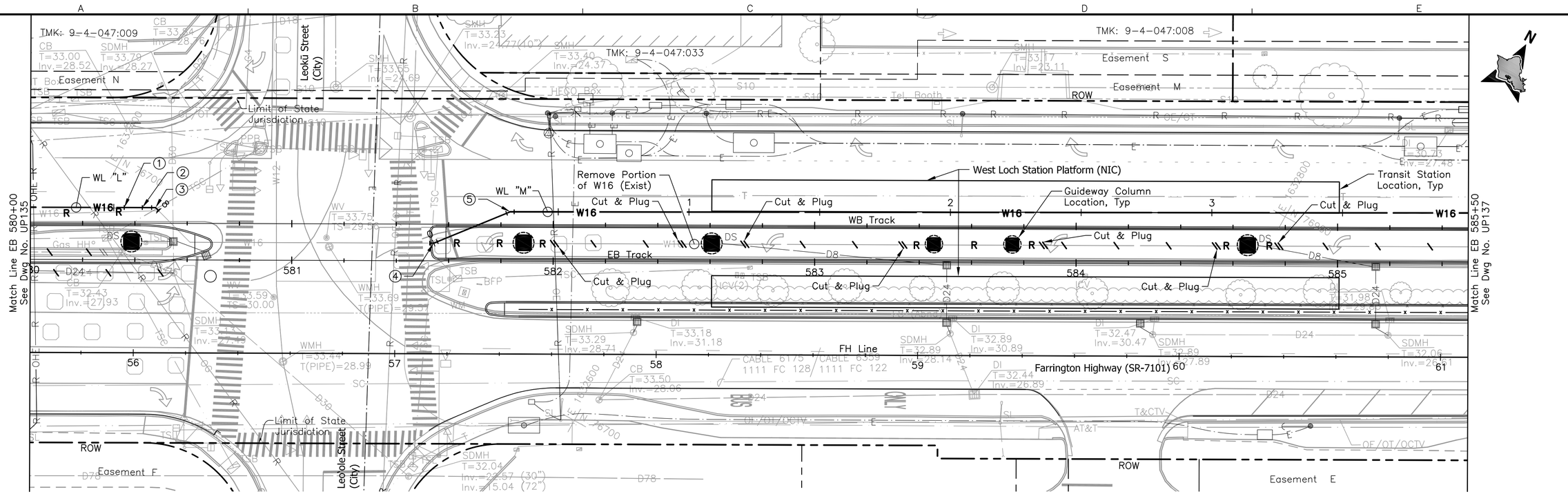
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 574+76.91 TO EB 580+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP135A
Drawing No: UP135A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 89 of 314



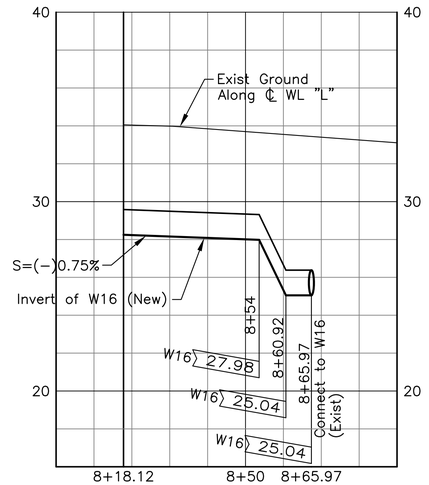
① STA 55+96.36 FH Line, O/S 55.55' Lt.
=8+54 WL "L"
1–16" ⅛ Bend (TV), D.I.
1–Conc Blk.

② STA 56+03.28 FH Line, O/S 55.56' Lt.
=8+60.92 WL "L"
1–16" ⅛ Bend (BV), D.I.
1–Conc Blk.

③ STA 56+08.34 FH Line, O/S 55.56' Lt.
=8+65.97 WL "L"
Connect to W16 (Exist)
1–16" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–16" Sleeve, 15" Long
8± LF 16" D.I. Pipe, CL. 52
Temp for Testing:
1–16" Cap w/ 4" C.O.
1–Conc Blk.

④ STA 57+14.78 FH Line, O/S 42.32' Lt.
=0+00 WL "M"
Connect to W16 (Exist)
1–16" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–16" Sleeve, 15" Long
8± LF 16" D.I. Pipe, CL. 52
Temp for Testing:
1–16" Cap w/ 4" C.O.
1–Conc Blk.

⑤ STA 57+44.01 FH Line, O/S 54.42' Lt.
=0+31.64 WL "M"
1–16" ⅛ Bend (H), D.I.
1–Conc Blk.



PROFILE: WL "L"

PROFILE: WL "M"

NOTE:

For drainage relocations, see Drawing No. UP136A.

Rev	By	Date	Description
B	JY	05–22–09	Added Profiles and Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant: R. M. TOWILL CORPORATION
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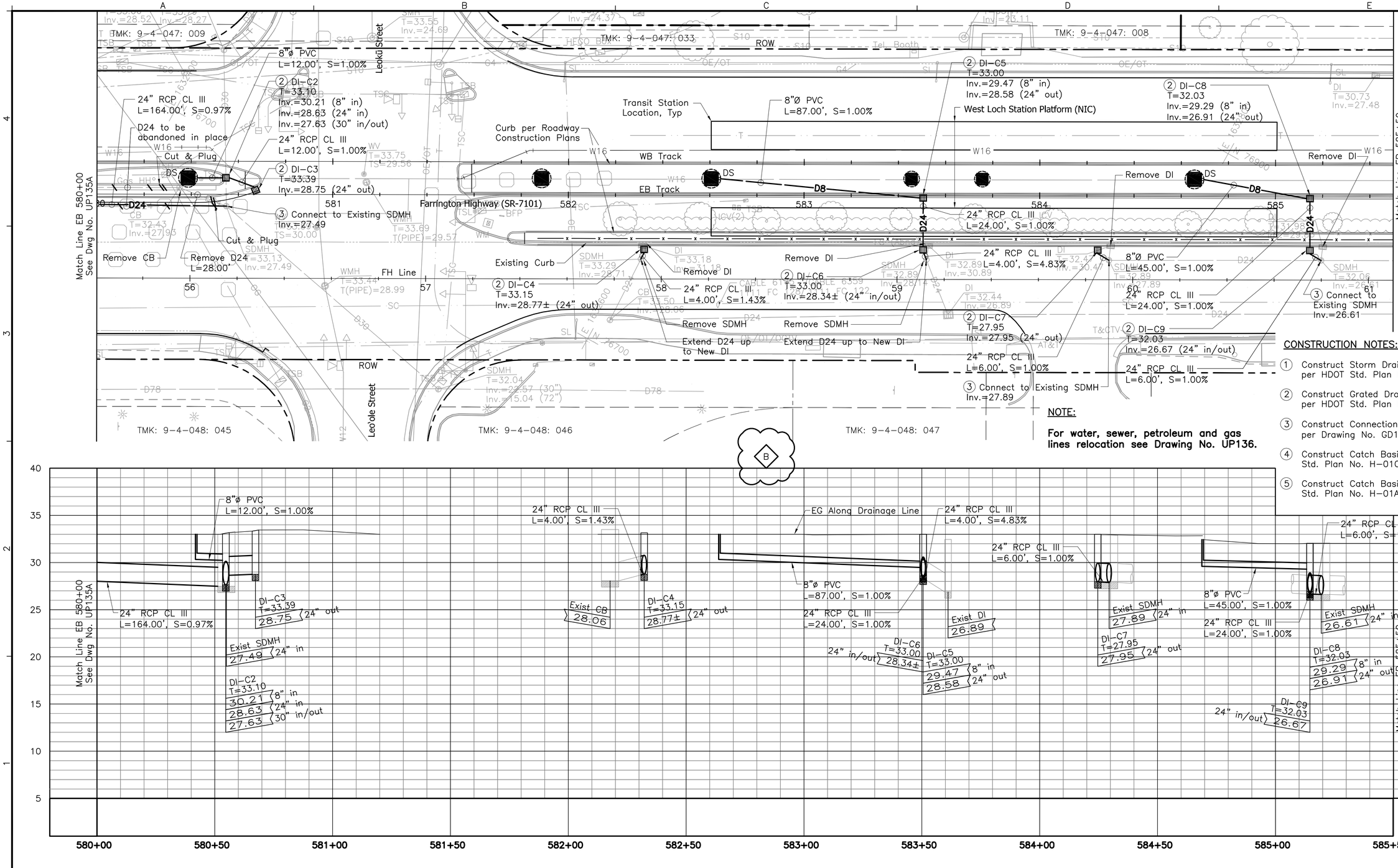
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 580+00 TO EB 585+50 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP136
Drawing No.: UP136 Rev.: B
Scale: 1"=20'
Page No.: 90 of 314



NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP136.

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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www.lyonassociates.com
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT

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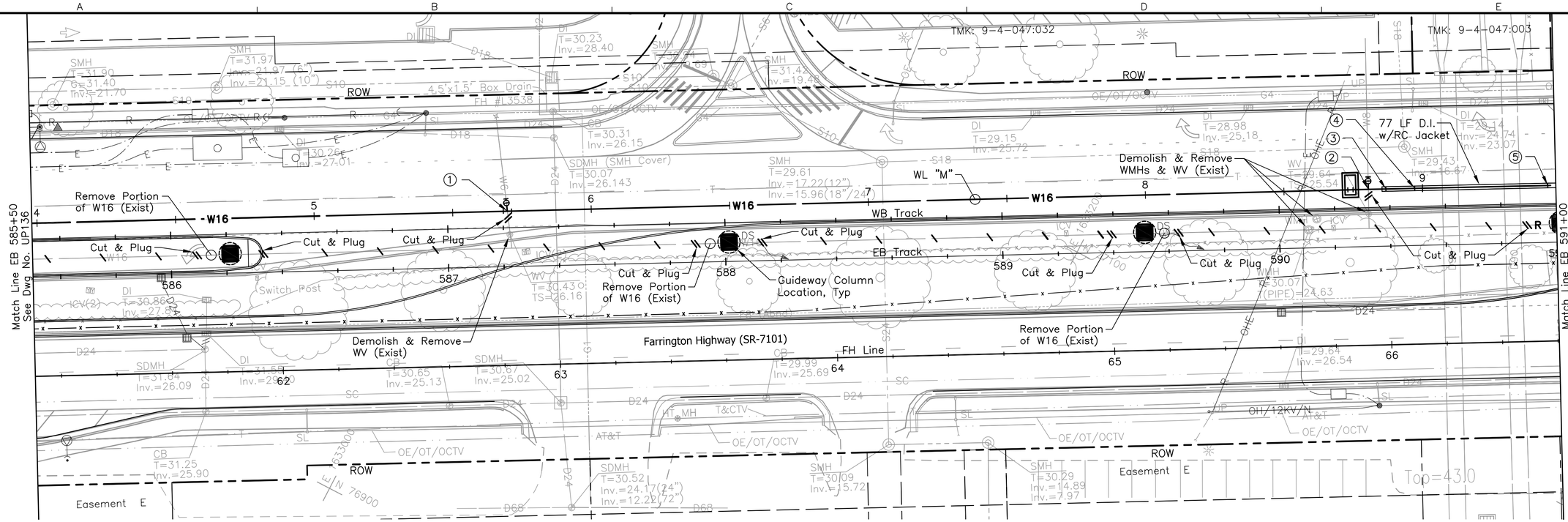
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 580+00 TO EB 585+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP136A
Drawing No.: UP136A
Rev.: B
Scale: 1"=20' H, 1"=5' V



① STA 62+82.12 FH Line, O/S 55.55' Lt.
=5+69.75 WL "M"
Connect to W6 (Exist)
1–16"x6" Tee
1–Conc Blk.
1–6" GV, 150#
1–Valve Box

② STA 65+92.83 FH Line, O/S 56.20' Lt.
=8+80.46 WL "M"
Connect to W8 (Exist)
1–16"x8" Tee
1–Conc Blk.
1–Type "A" Water Manhole
1–16" BGGV, CL. 150, FE
2–Flanged Dismanteling Joint
2–Flanged Adapter, FxB
1–Conc Capping Collar
1–Valve Marker
1–8" GV, 150#
1–Valve Box

B

③ STA 65+99.17 FH Line, O/S 56.21' Lt.
=8+86.80 WL "M"
1–16" ⅛ Bend (TV), D.I.
1–Conc Blk.

④ STA 66+09.57 FH Line, O/S 56.23' Lt.
=8+97.20 WL "M"
1–16" ⅛ Bend (BV), D.I.
1–Conc Blk.

⑤ STA 66+57.57 FH Line, O/S 56.09' Lt.
=9+45.20 WL "M"
1–16" ⅛ Bend (BV), D.I.
1–Conc Blk.

NOTE:

For drainage relocations, see Drawing No. UP137A.
For WL "M" Profile, see Drawing No. UP137B.

20' 0 20'
4' 0 4'

Rev	By	Date	Description
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

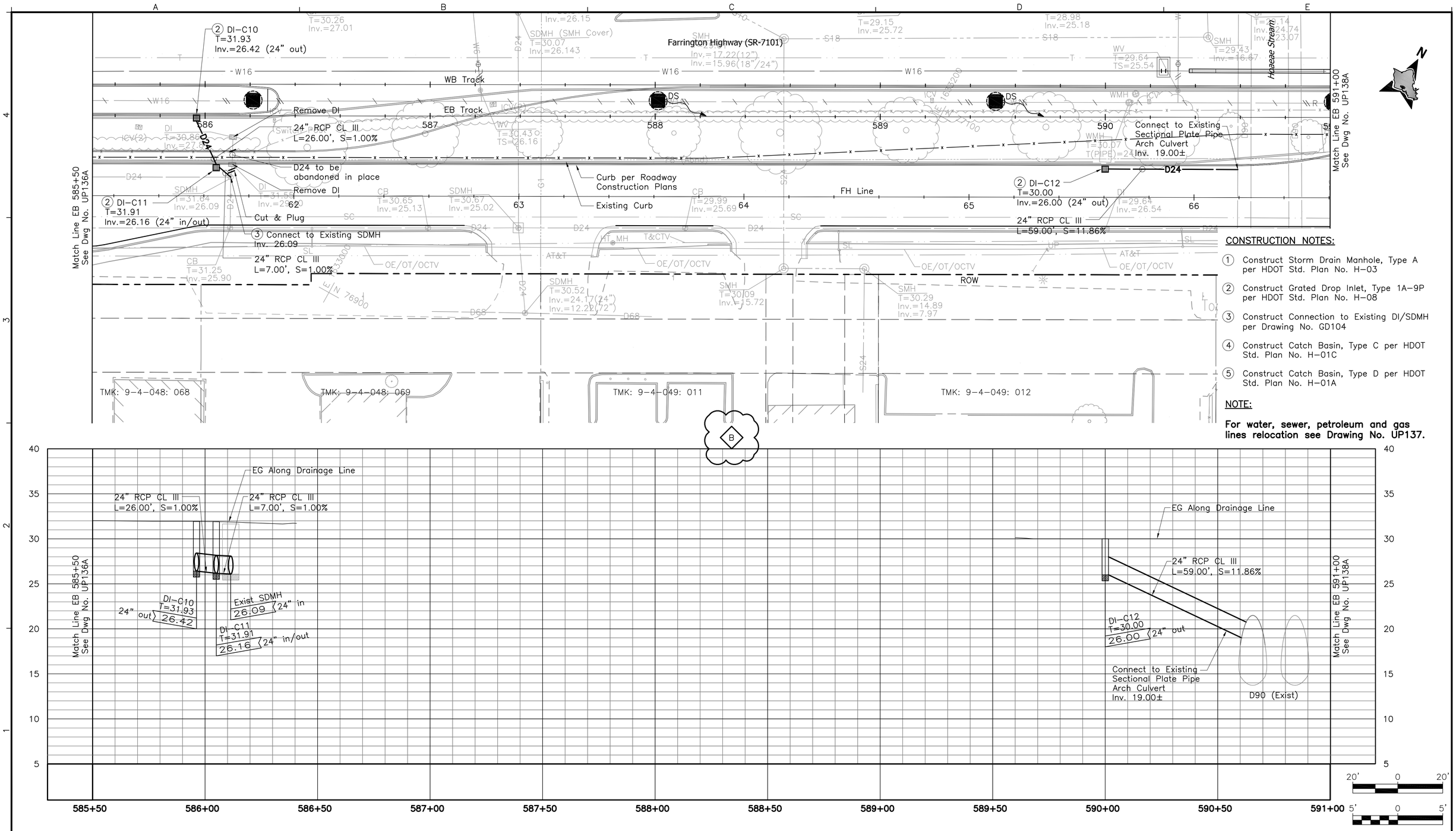
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 585+50 TO EB 591+00 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP137
Drawing No.: UP137 Rev. B
Scale: 1"=20'
Page No. 92 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP137.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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Fax: (808) 523-1738
E-mail: adminhl@lyonassociates.com
www.lyonassociates.com

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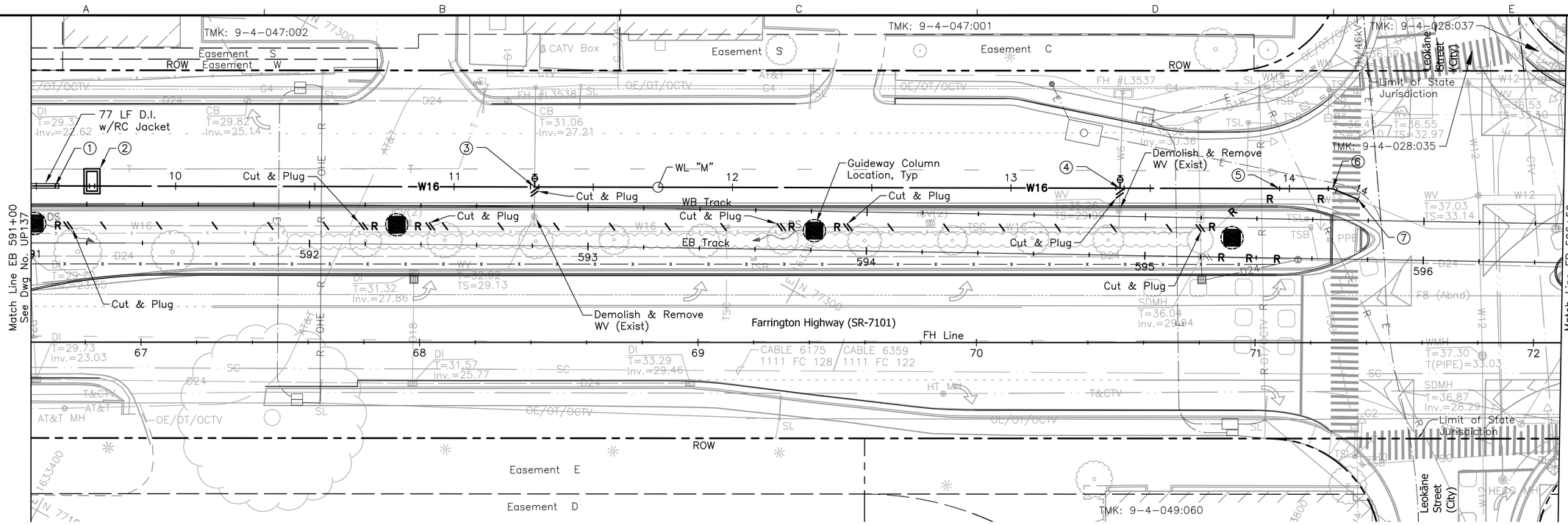
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 585+50 TO EB 591+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP137A
Drawing No: UP137A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 93 of 314



① STA 66+69.17 FH Line, O/S 56.07' Lt.
=9+56.80 WL "M"
1–16" ⅛ Bend (TV), D.I.
1–Conc Blk.

② STA 66+82.37 FH Line, O/S 56.04' Lt.
=9+70 WL "M"
1–Type "A" WMH
1–16" BGGV, CL. 150, FE
1–16" Flanged Dismanteling Joint
2–16" Flange Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

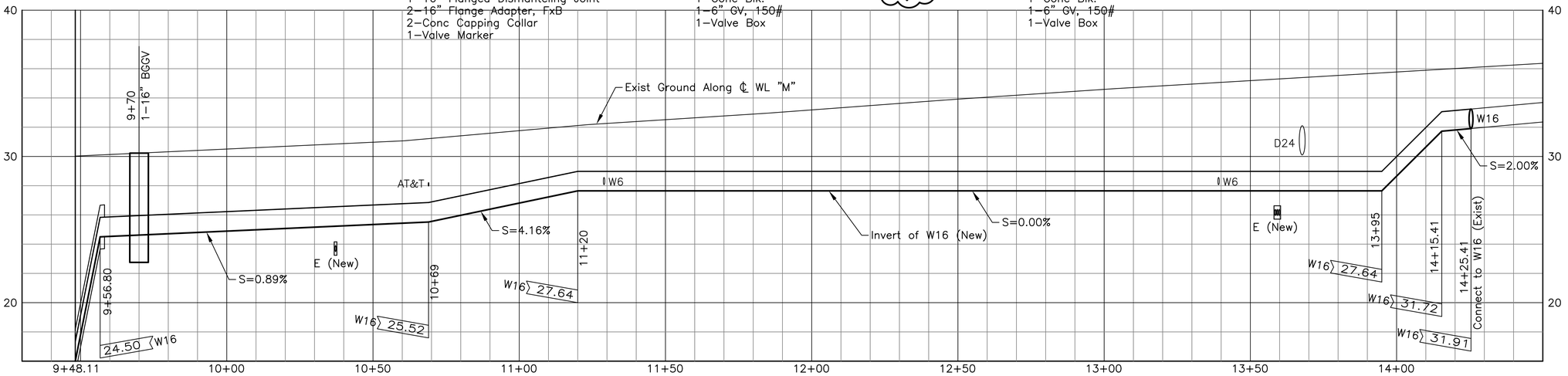
③ STA 68+41.30 FH Line, O/S 55.77' Lt.
=11+28.93 WL "M"
Connect to W6 (Exist)
1–16"x6" Tee
1–Conc Blk.
1–6" GV, 150#
1–Valve Box

④ STA 70+51.49 FH Line, O/S 55.41' Lt.
=13+39.12 WL "M"
Connect to W6 (Exist)
1–16"x6" Tee
1–Conc Blk.
1–6" GV, 150#
1–Valve Box

⑤ STA 71+08.81 FH Line, O/S 55.31' Lt.
=13+96.44 WL "M"
1–16" 1/32 Bend (BV), D.I.
1–Conc Blk.

⑥ STA 71+27.81 FH Line, O/S 55.27' Lt.
=14+15.41 WL "M"
1–16" 1/16 Bend (H & TV), D.I.
1–Conc Blk.

⑦ STA 71+37.00 FH Line, O/S 51.43' Lt.
=14+25.41 WL "M"
Connect to W16 (Exist)
1–16" Sleeve, 15" Long
8± LF 16" D.I. Pipe, CL. 52
Temp for Testing:
1–16" Cap w/ 4" C.O.
1–Conc Blk.



PROFILE: WL "M"

NOTE:

For drainage relocations, see Drawing No. UP138A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05–22–09	Added Profile and Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

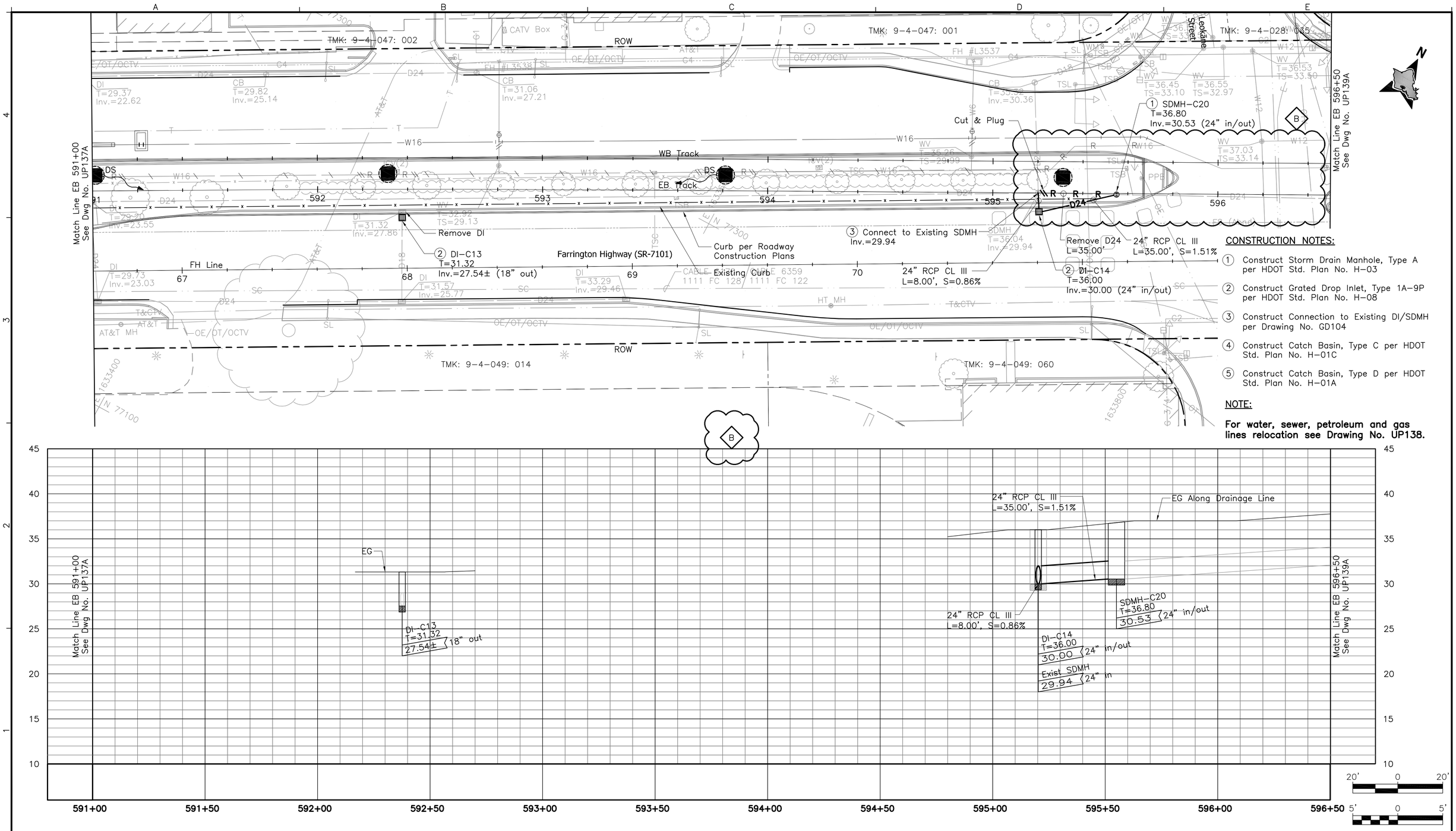
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 591+00 TO EB 596+50 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP138
Drawing No.: UP138 Rev.: B
Scale: 1"=20'



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP138.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Drain Line Revisions
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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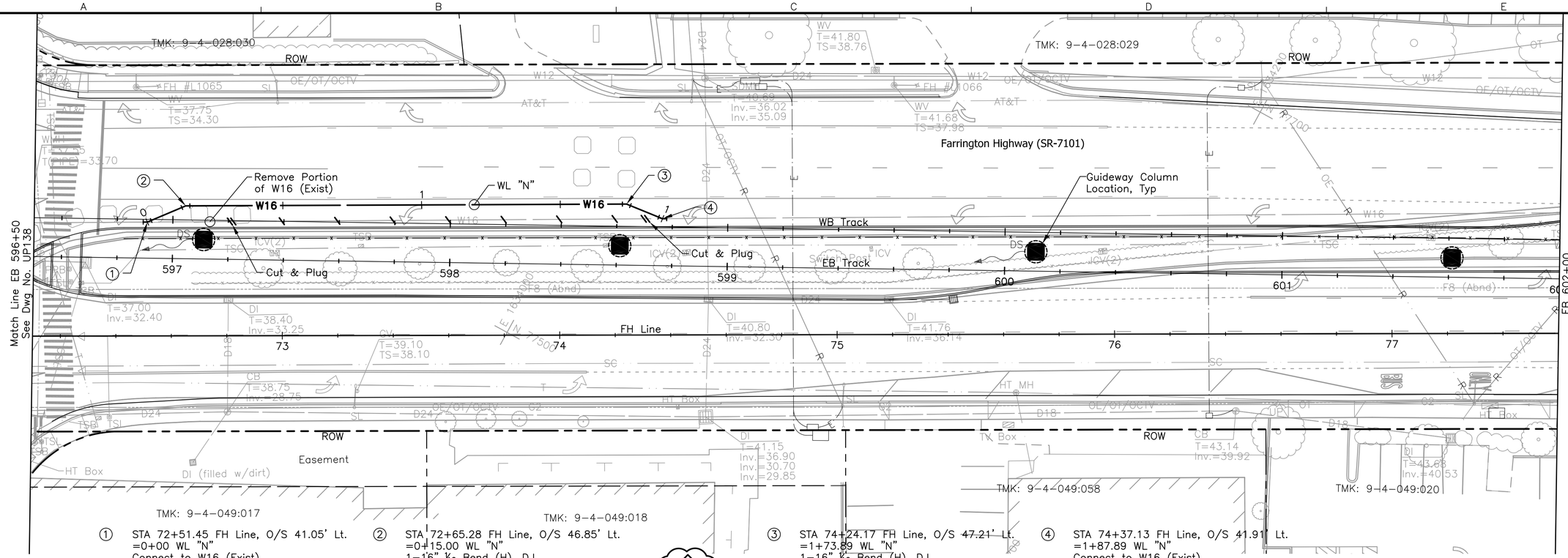
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 591+00 TO EB 596+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP138A
Drawing No.: UP138A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 96 of 314



NOTE:

For drainage relocations, see Drawing No. UP139A.

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
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Designed: D Toba
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Date: 04-03-09

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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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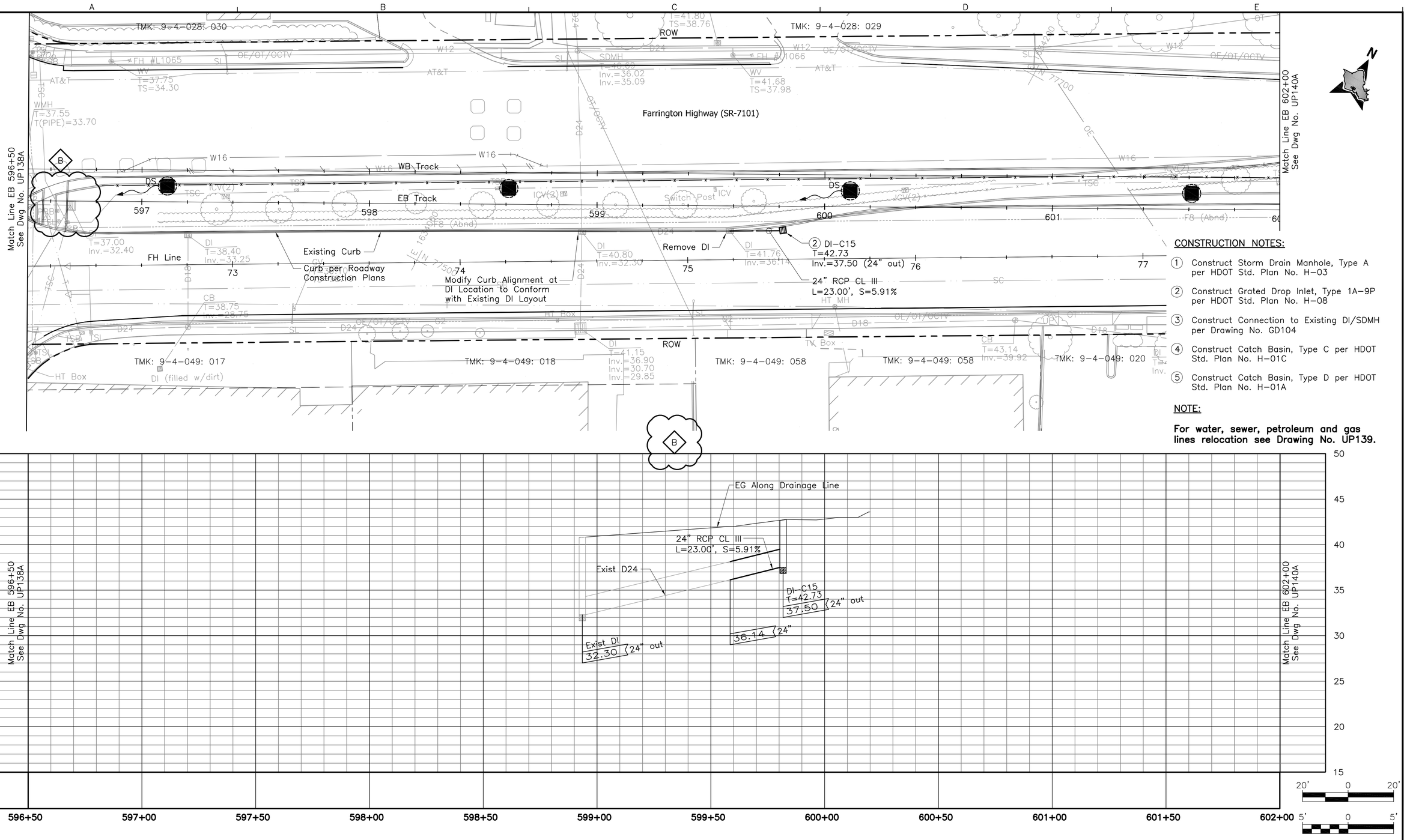
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 596+50 TO EB 602+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP139
Drawing No.: UP139 Rev.: B
Scale: 1"=20'
Page No.: 97 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP139.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT
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Honolulu, HI 96813 USA
Voice: (808) 536-6621
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www.lyonassociates.com

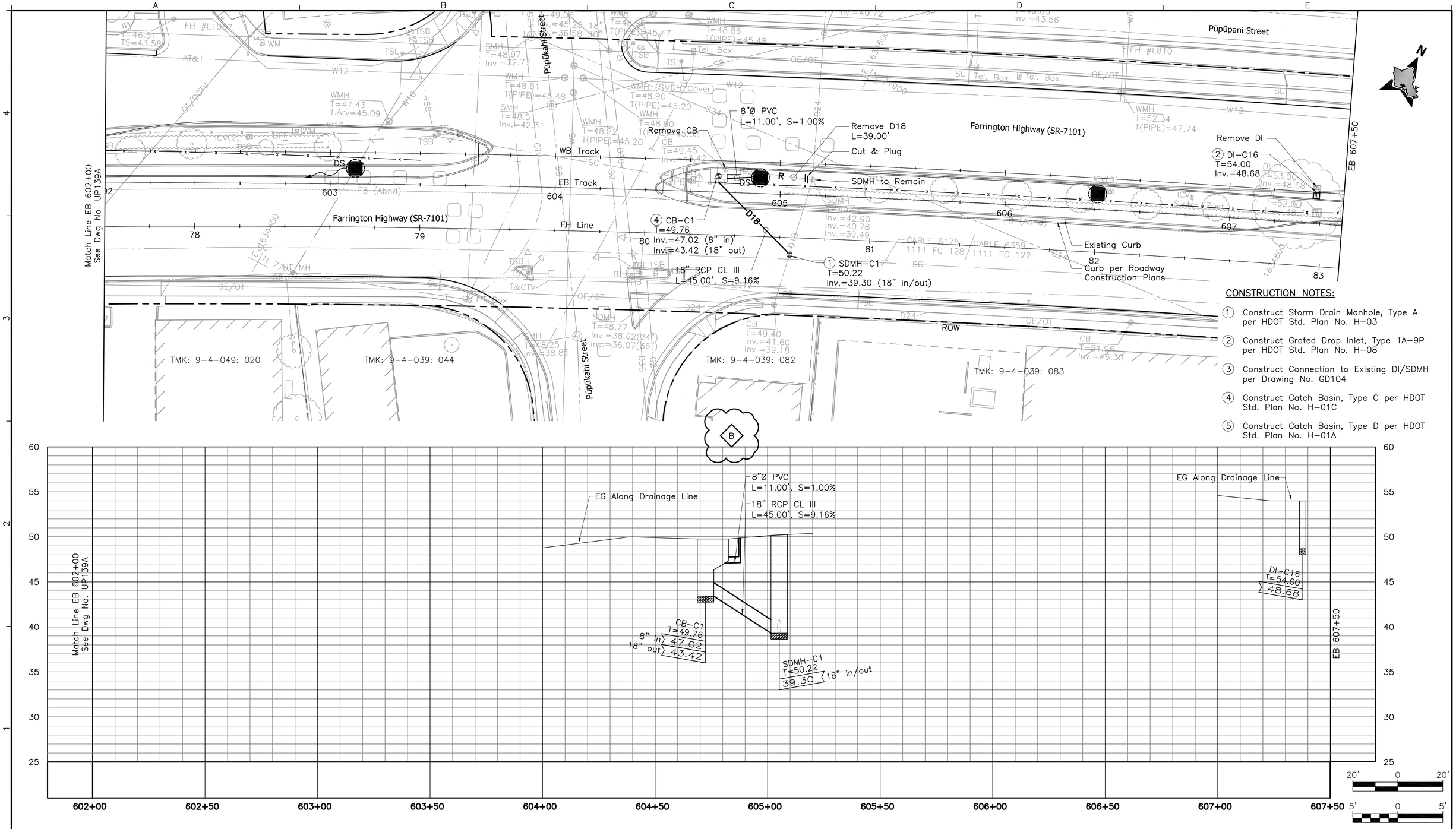
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 596+50 TO EB 602+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP139A
Drawing No.: UP139A Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 98 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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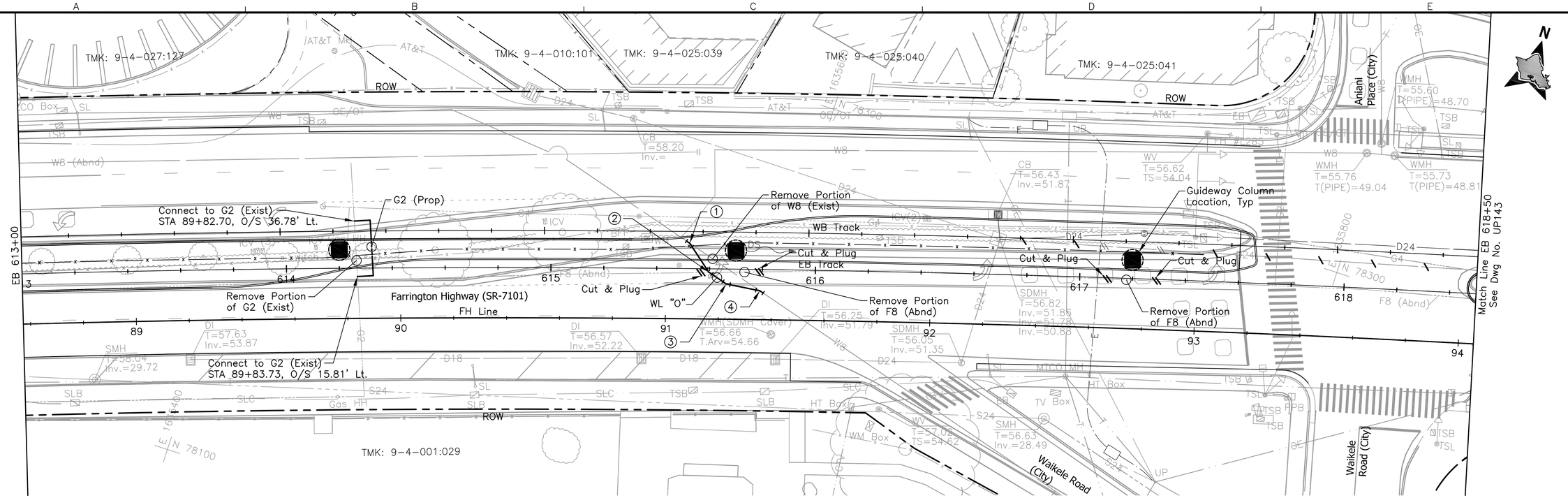
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 602+00 TO EB 607+50 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP140A
Drawing No.: UP140A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 100 of 314



① STA 91+08.97 FH Line, O/S 28.54' Lt.
=0+00 WL "O"
Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF D.I. Pipe, CL. 52

② STA 91+16.21 FH Line, O/S 17.76' Lt.
=0+13 WL "O"
1–8" ⅛ Bend (H)
1–Conc Blk.

B

③ STA 91+22.87 FH Line, O/S 13.35' Lt.
=0+21 WL "O"
1–8" ⅛ Bend (H)
1–Conc Blk.

④ STA 91+35.62 FH Line, O/S 10.90' Lt.
=0+34 WL "O"
Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF D.I. Pipe, CL. 52

20' 0 20'

4' 0 4'

NOTE:

For drainage relocations, see Drawing No. UP142A.

Rev	By	Date	Description
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

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WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 613+00 TO EB 618+50 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP142
Drawing No.: UP142 Rev. B
Scale: 1"=20'
Page No. 101 of 314

TMK: 9-4-027: 127

TMK: 9-4-027: 101

TMK: 9-4-025: 039

TMK: 9-4-025: 040

TMK: 9-4-025: 041

TMK: 9-4-001: 029

ROW

Farrington Highway (SR-7101)

WB Track

EB Track

FH Line

Waikele Road

EB 613+00

Match Line EB 618+50
See Dwg No. UP143A

(2) DI-C17
T=56.96
Inv.=51.96 (24" out)

Remove CB
24" RCP CL III
L=10.00', S=1.00%

(1) SDMH-C2
T=56.29
Inv.=50.34 (24" in/out)

24" RCP CL III
L=55.00', S=0.99%

Remove D24
L=20.00'

24" RCP CL III
L=242.00', S=0.99%

(3) Connect to Existing SDMH
Inv.=50.88

Curb per Roadway
Construction Plans

Existing Curb

Cut & Plug

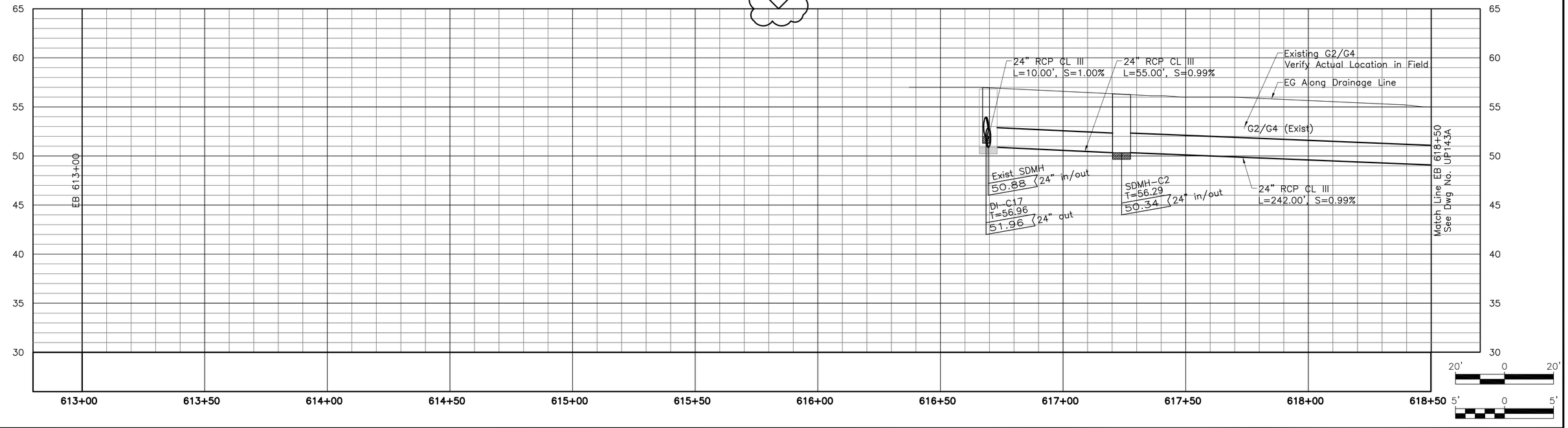
D24 to be
abandoned in place

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP142.



Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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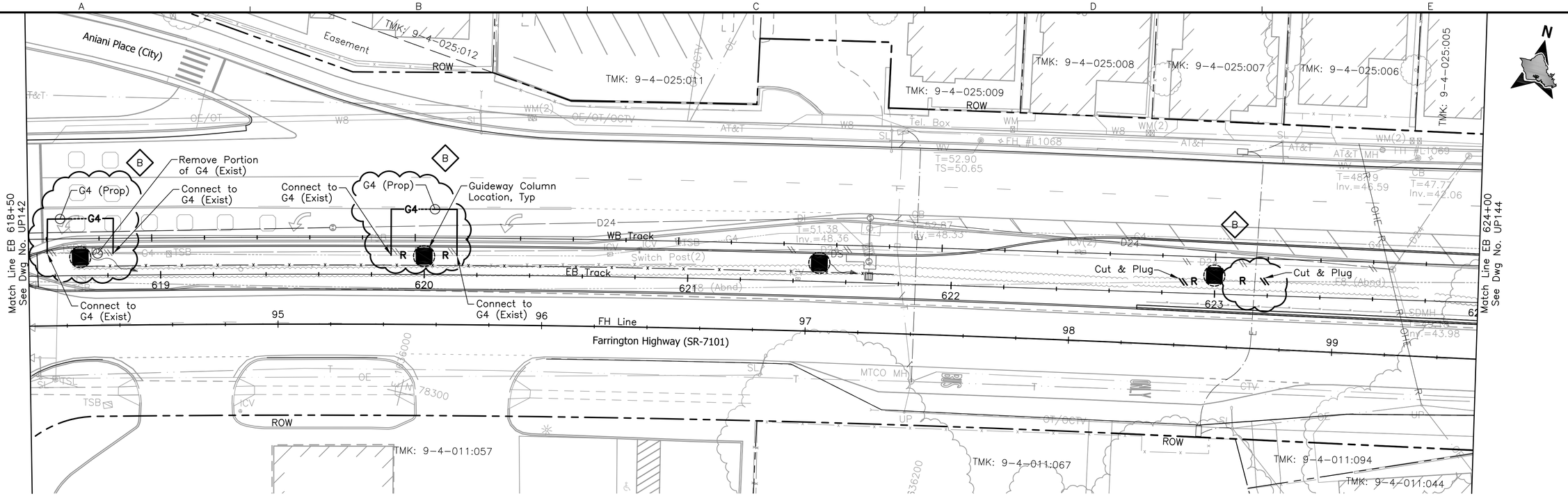
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 613+00 TO EB 618+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP142A
Drawing No: UP142A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 102 of 314



NOTE:

For drainage relocations, see Drawing No. UP143A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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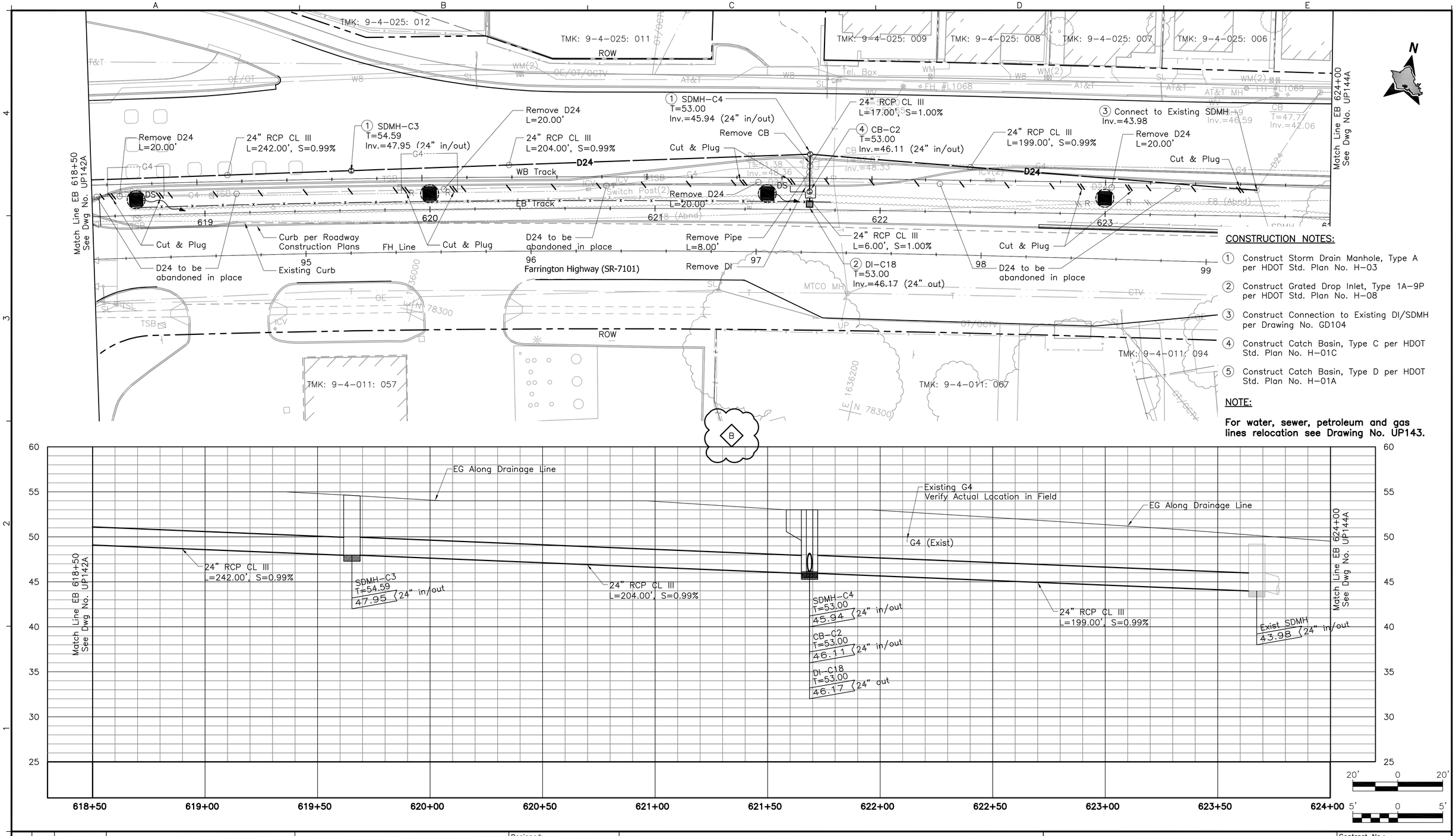
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 618+50 TO EB 624+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP143
Drawing No.: UP143 Rev. B
Scale: 1"=20'
Page No. 103 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP143.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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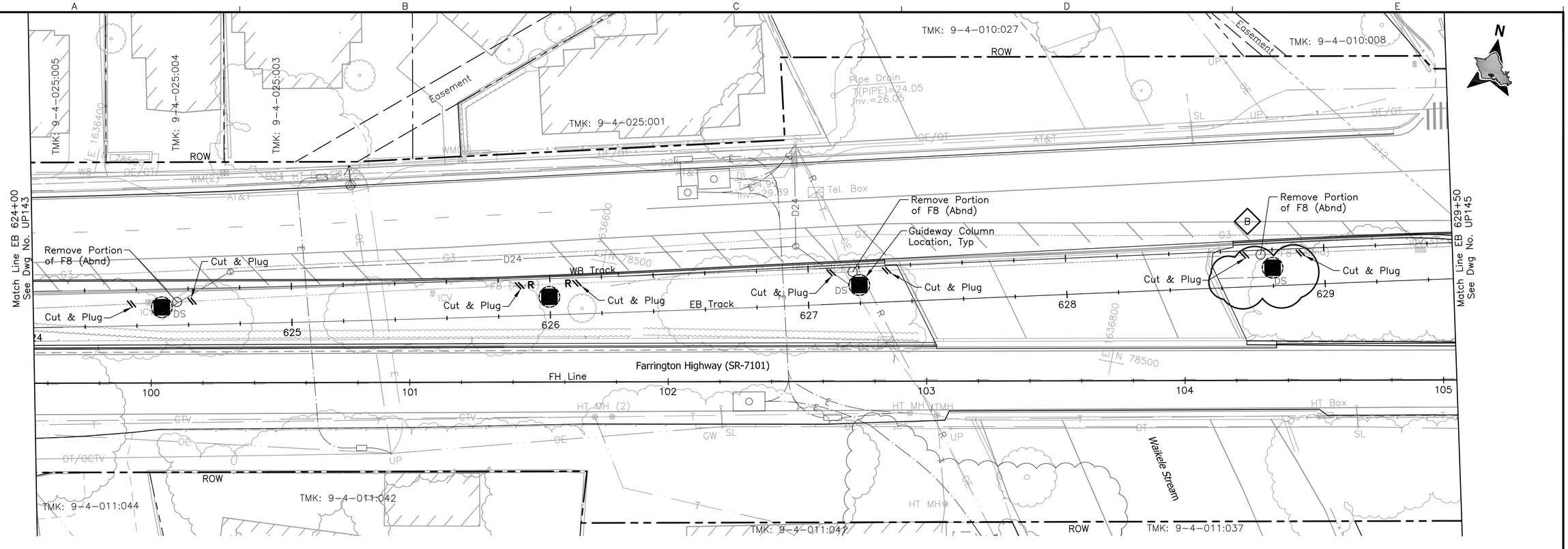
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 618+50 TO EB 624+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP143A
Drawing No.: UP143A Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 104 of 314



NOTE:

For drainage relocations, see Drawing No. UP144A.

20' 0 20'

Rev	By	Date	Description
B	JY	05-22-09	Drainage Revision
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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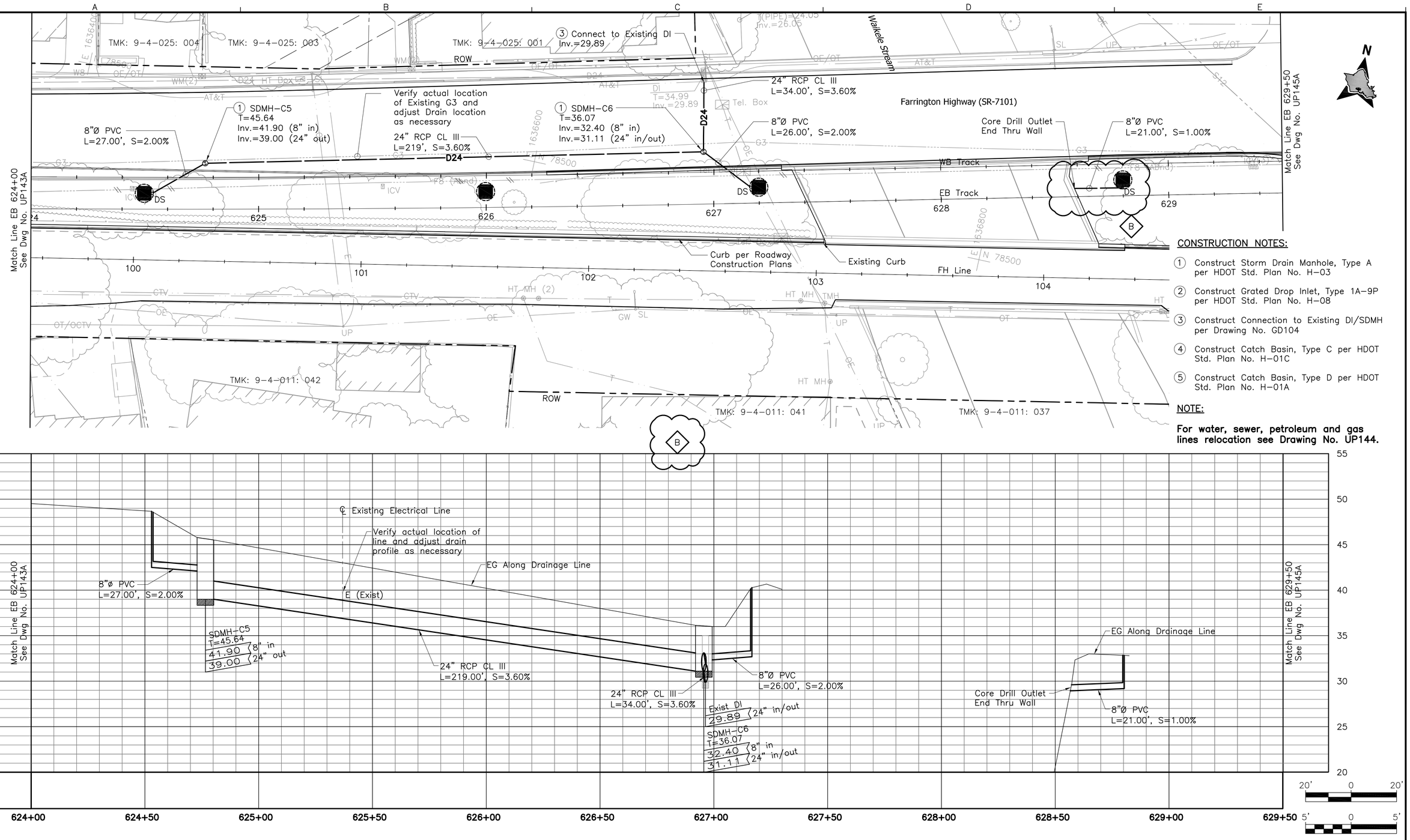
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 624+00 TO EB 629+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP144
Drawing No.: UP144 Rev. B
Scale: 1"=20'
Page No. 105 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP144.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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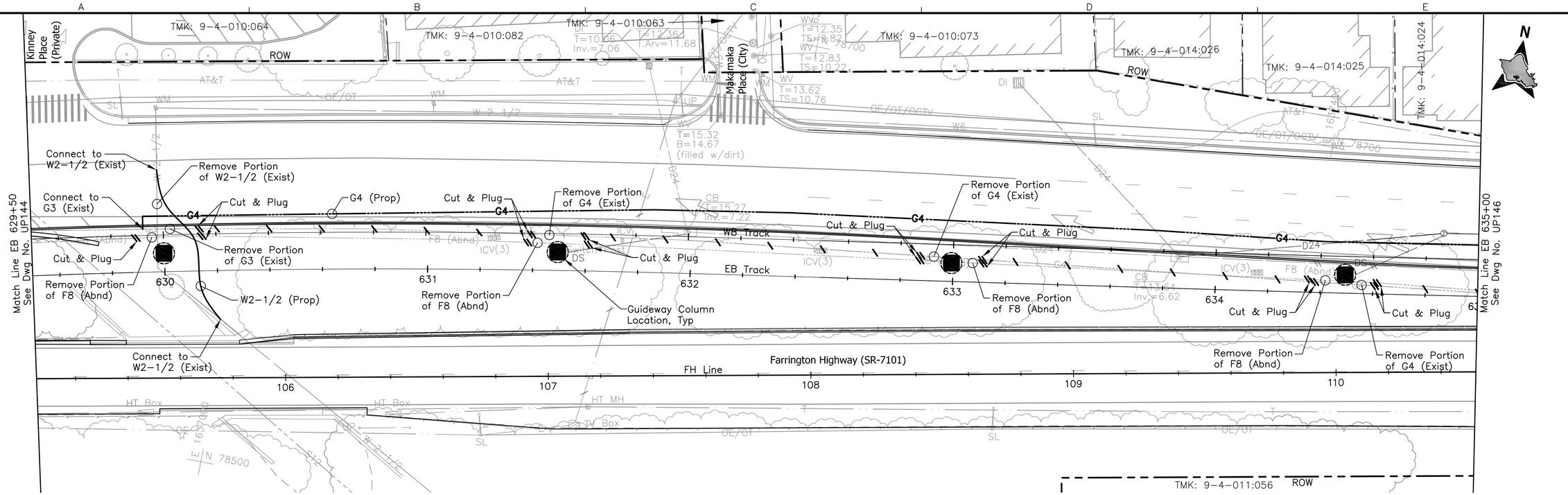
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 624+00 TO EB 629+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP144A
Drawing No.: UP144A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 106 of 314



NOTE:

For drainage relocations, see Drawing No. UP145A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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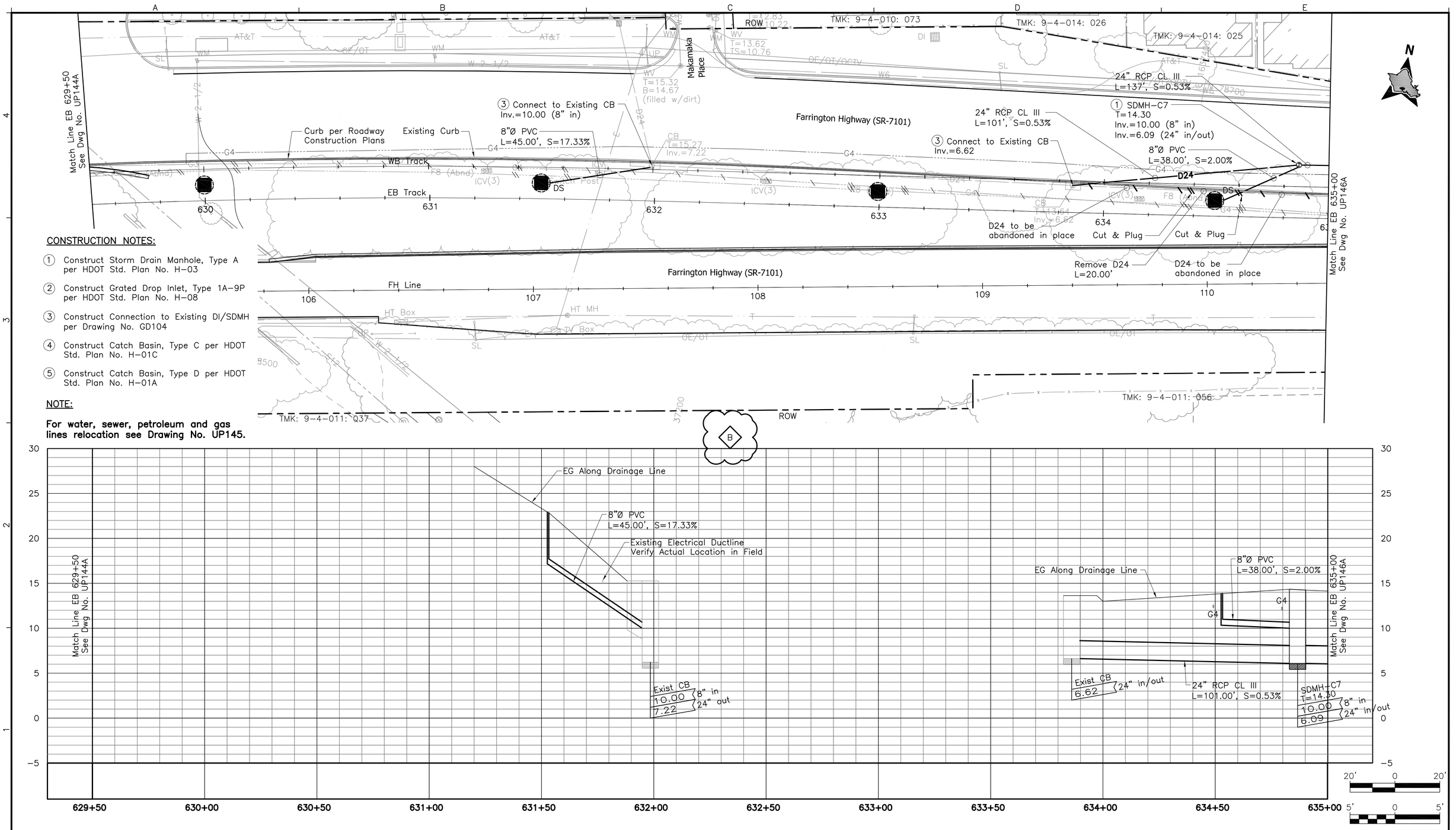
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 629+50 TO EB 635+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP145
Drawing No: UP145 Rev. A
Scale: 1"=20'
Page No. 107 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP145.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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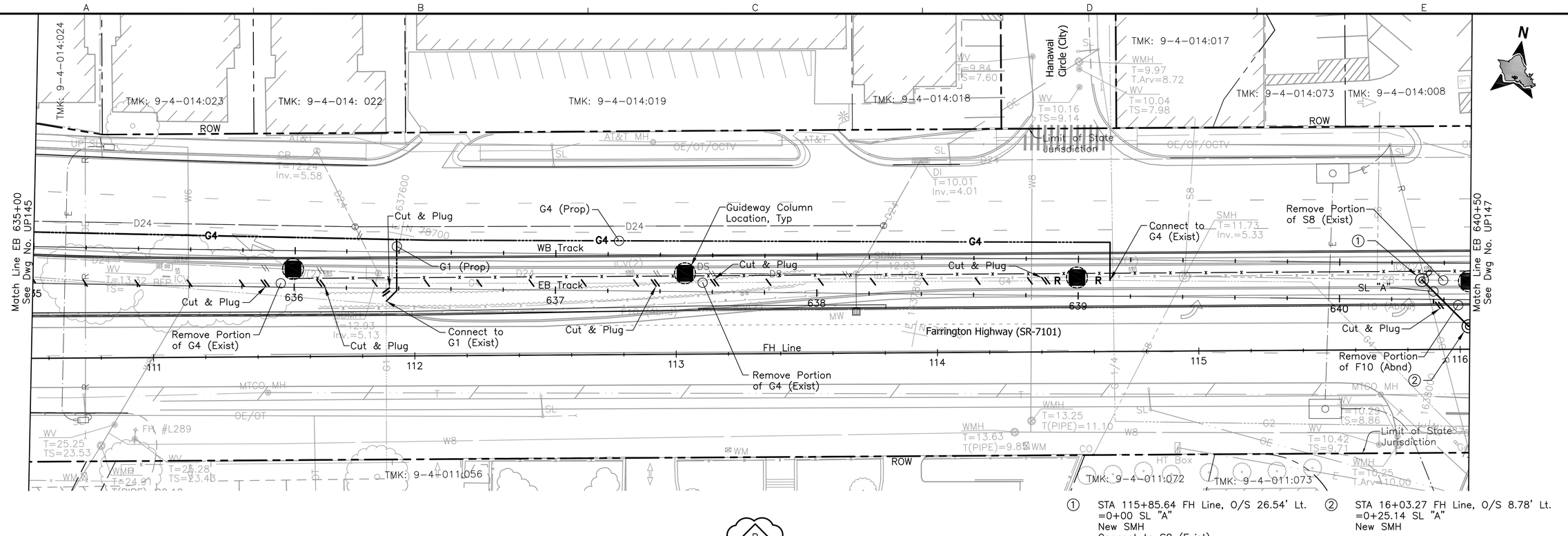
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 629+50 TO EB 635+00 SHEET 2 OF 2

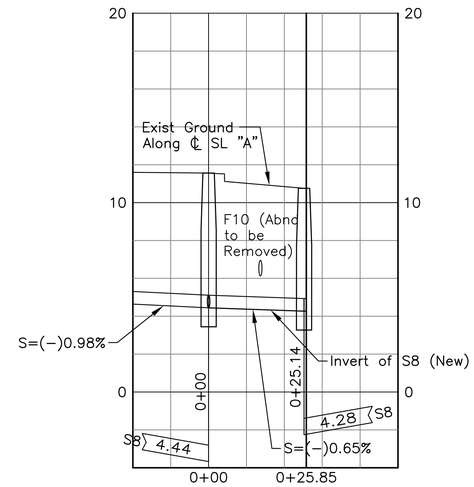
Contract No.: DB-1200
CADD File: WF-D03-UP145A
Drawing No.: UP145A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 108 of 314



B

① STA 115+85.64 FH Line, O/S 26.54' Lt.
=0+00 SL "A"
New SMH
Connect to S8 (Exist)

② STA 16+03.27 FH Line, O/S 8.78' Lt.
=0+25.14 SL "A"
New SMH



PROFILE: SL "A"

20' 0 20'

4' 0 4'

NOTE:

For drainage relocations, see Drawing No. UP146A.

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

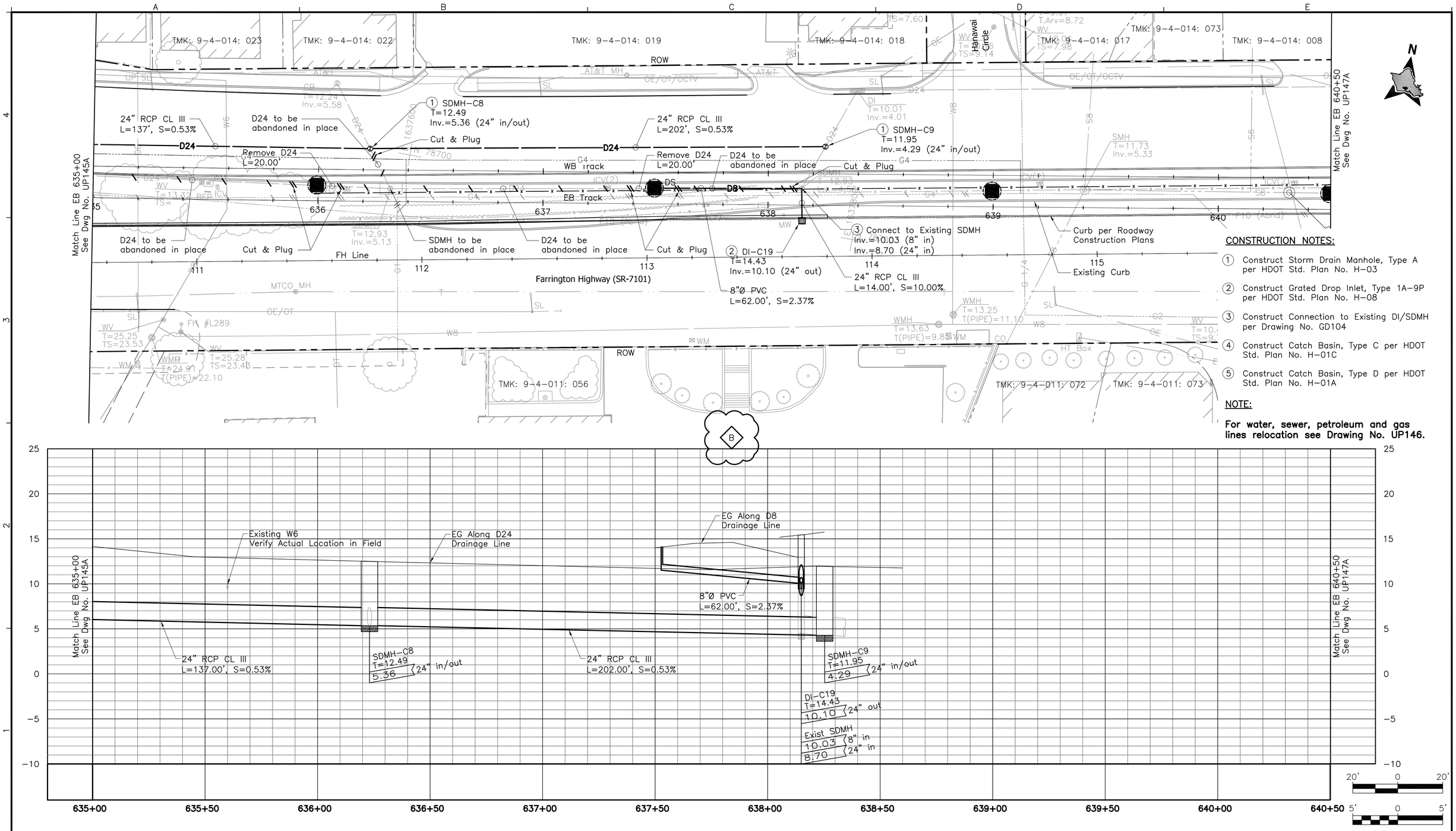
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 635+00 TO EB 640+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP146
Drawing No.: UP146 Rev. B
Scale: 1"=20'
Page No. 109 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP146.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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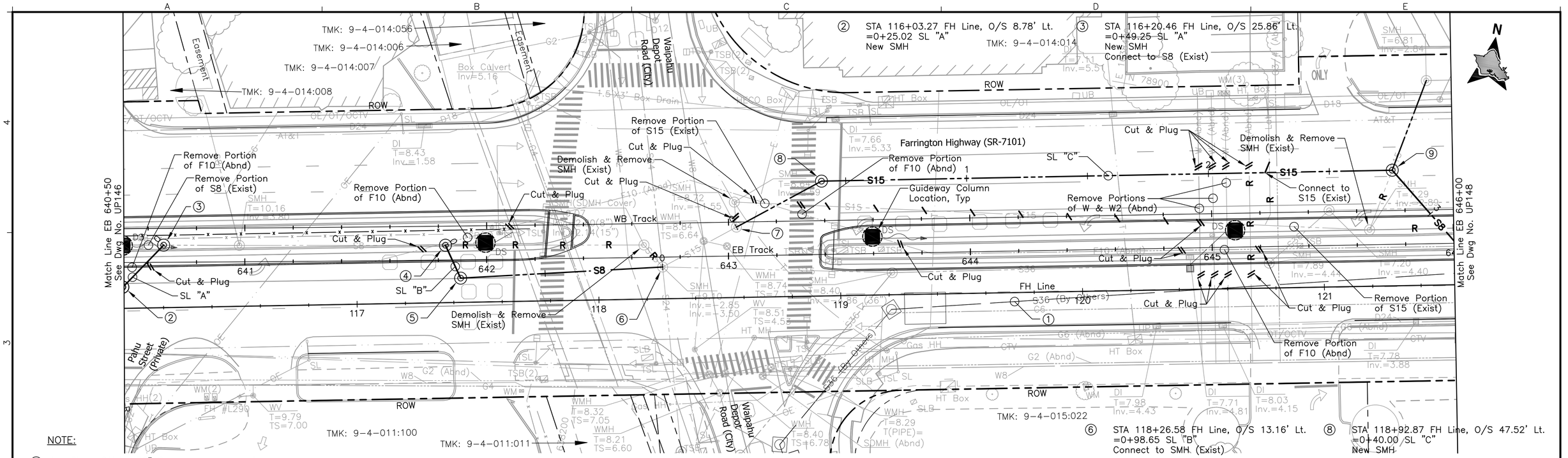
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 635+00 TO EB 640+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP146A
Drawing No.: UP146A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 110 of 314



NOTE:

① Koa Ridge Offsite 36" Sewer, a proposed future microtunneling project by others, is shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with the Project to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

② STA 116+03.27 FH Line, O/S 8.78' Lt.
=0+25.02 SL "A"
New SMH

③ STA 116+20.46 FH Line, O/S 25.86' Lt.
=0+49.25 SL "A"
New SMH
Connect to S8 (Exist)

④ STA 117+36.93 FH Line, O/S 23.76' Lt.
=0+00 SL "B"
New SMH
Connect to S8 (Exist)

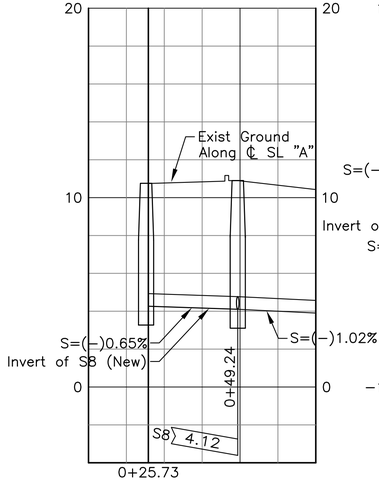
⑤ STA 117+42.98 FH Line, O/S 10.04' Lt.
=0+15.00 SL "B"
New SMH

⑥ STA 118+26.58 FH Line, O/S 13.16' Lt.
=0+98.65 SL "B"
Connect to SMH (Exist)

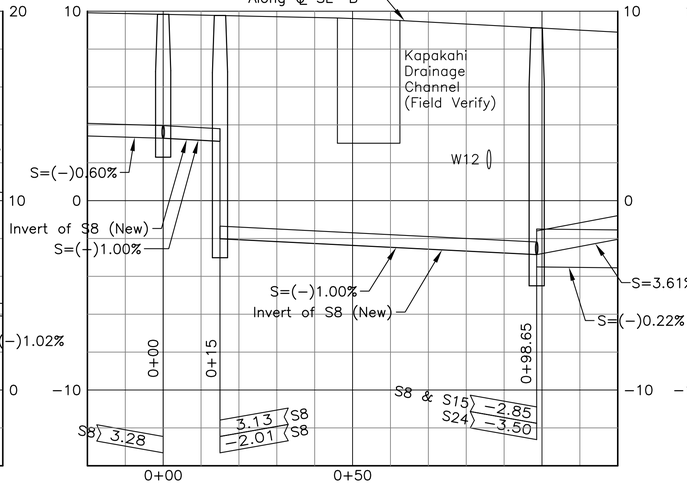
⑦ STA 118+57.36 FH Line, O/S 29.11' Lt.
=0+00 SL "C"
Construct New Shallow Drop Manhole
Connect to S15 (Exist)

⑧ STA 118+92.87 FH Line, O/S 47.52' Lt.
=0+40.00 SL "C"
New SMH

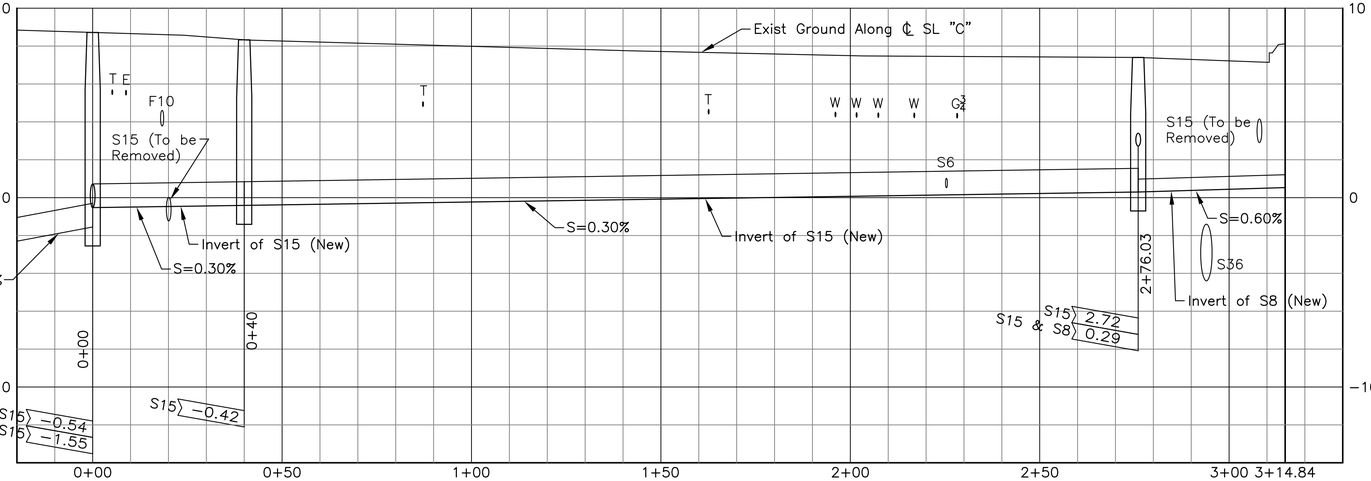
⑨ STA 121+28.90 FH Line, O/S 47.86' Lt.
=2+76.03 SL "C"
New SMH
Connect S15 (Exist)



PROFILE: SL "A"



PROFILE: SL "B"



PROFILE: SL "C"

NOTE:

For drainage relocations, see Drawing No. UP147A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

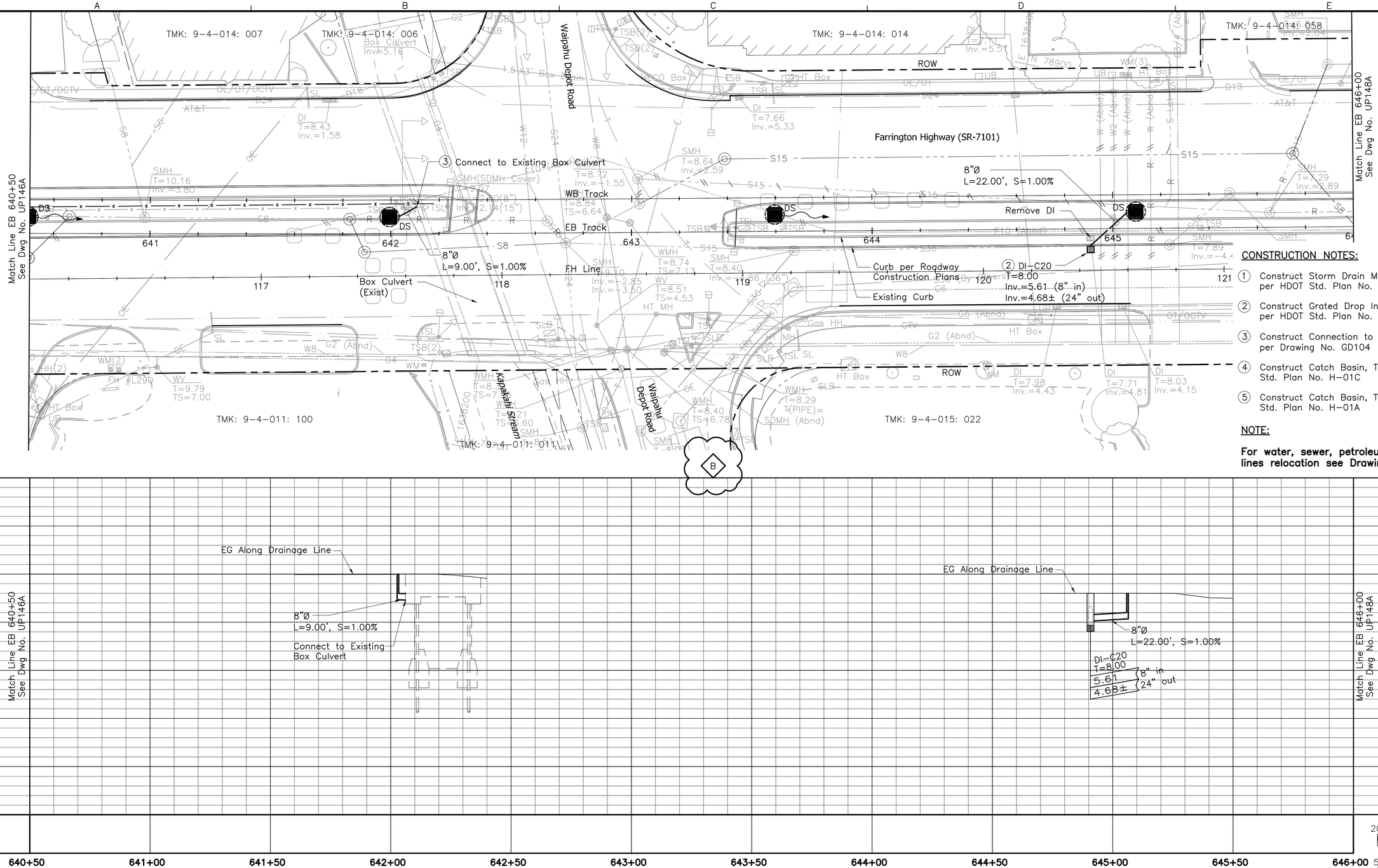
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 640+50 TO EB 646+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP147
Drawing No.: UP147 Rev. B
Scale: 1"=20'
Page No. 111 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP147.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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841 Bishop Street, Suite 2006
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E-mail: adminhi@lyonassociates.com
www.lyonassociates.com

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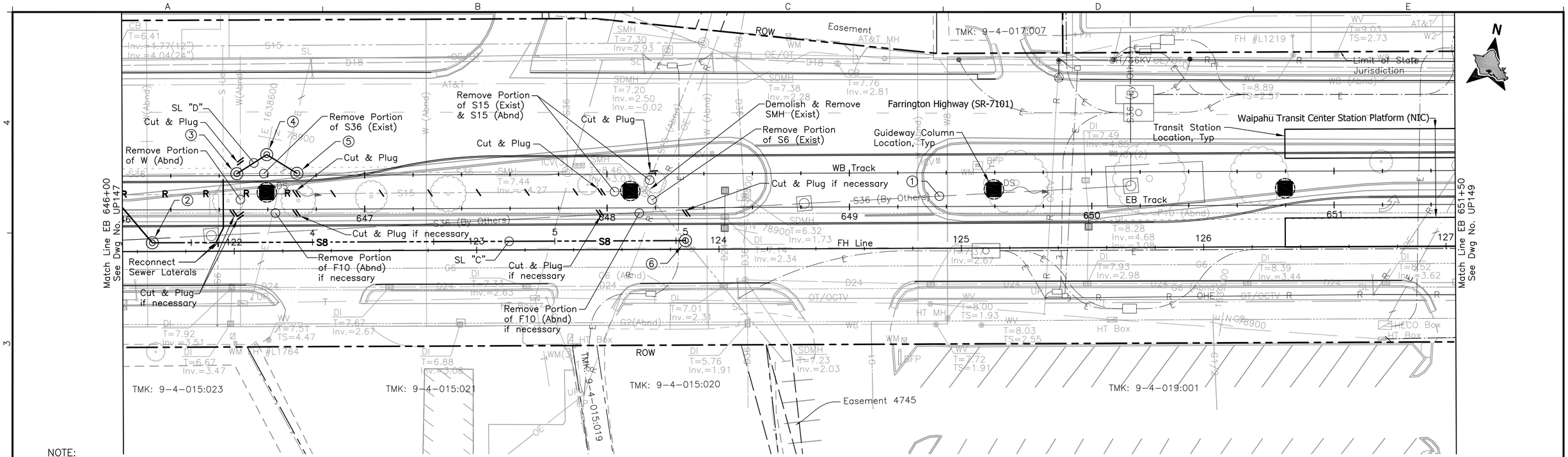
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 640+50 TO EB 646+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP147A
Drawing No: UP147A
Rev.: B
Scale: 1"=20' H, 1"=5' V



NOTE:

① Koa Ridge Offsite 36" Sewer, a proposed future microtunneling project by others, is shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with the Project to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

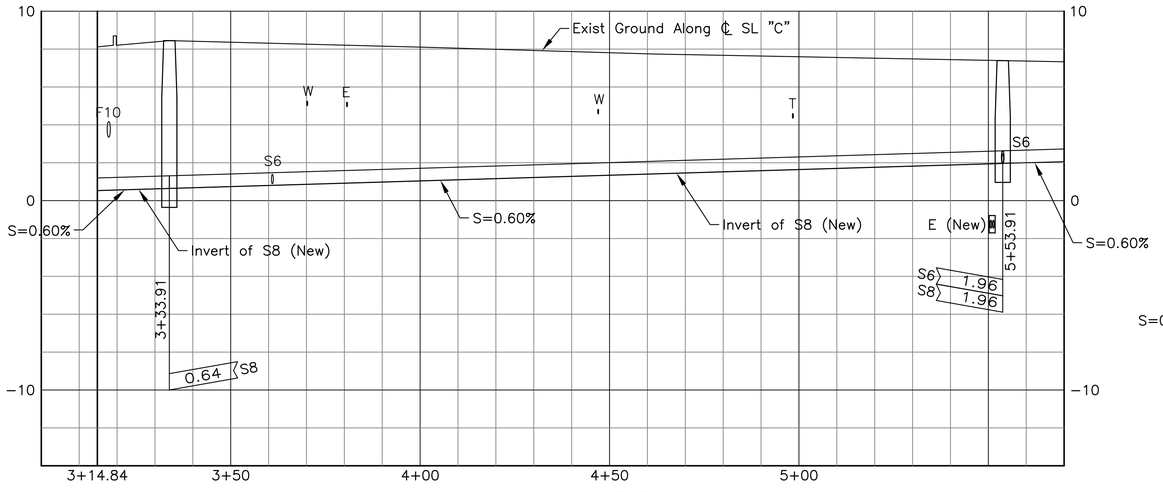
② STA 121+66.19 FH Line, O/S 3.59' Lt.
=3+33.91 SL "C"
New SMH

③ STA 122+01.19 FH Line, O/S 31.98' Lt.
=0+00 SL "D"
New SMH
Connect S36 (Exist)

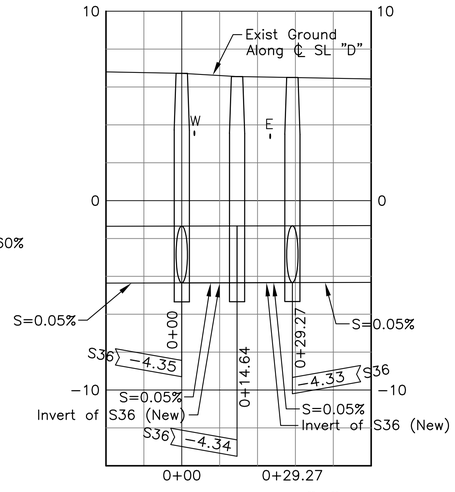
④ STA 122+13.57 FH Line, O/S 39.80' Lt.
=0+14.64 SL "D"
New SMH

⑤ STA 122+25.98 FH Line, O/S 32.04' Lt.
=0+29.28 SL "D"
New SMH
Connect S36 (Exist)

⑥ STA 123+86.19 FH Line, O/S 3.59' Lt.
=5+53.91 SL "C"
New SMH
Connect to S6 (Exist)



PROFILE: SL "C"



PROFILE: SL "D"

NOTE:

For drainage relocations, see Drawing No. UP148A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Added Profile and Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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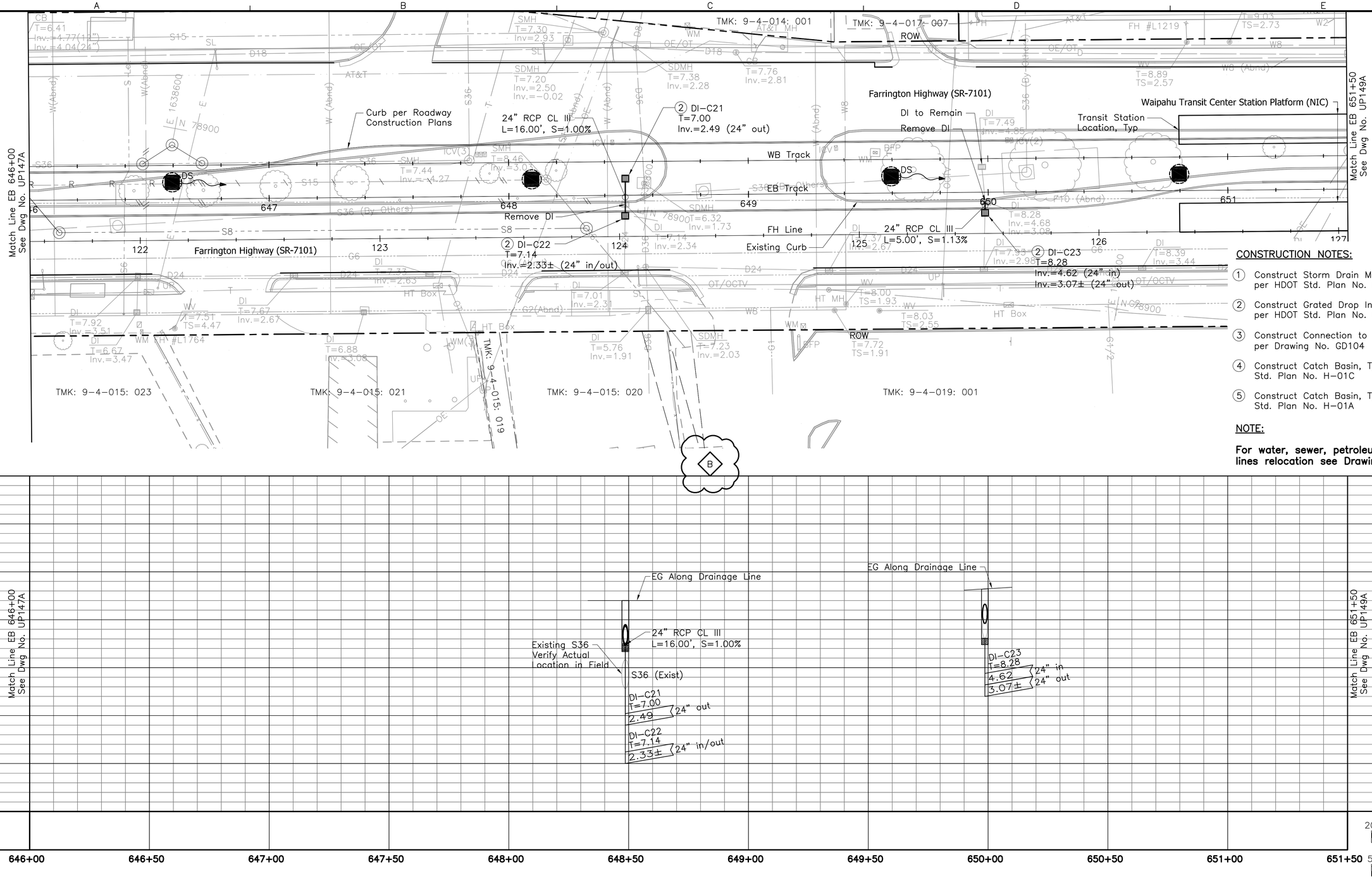
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 646+00 TO EB 651+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP148
Drawing No.: UP148 Rev.: B
Scale: 1"=20'
Page No.: 113 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP148.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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E-mail: adminhi@lyonassociates.com
www.lyonassociates.com

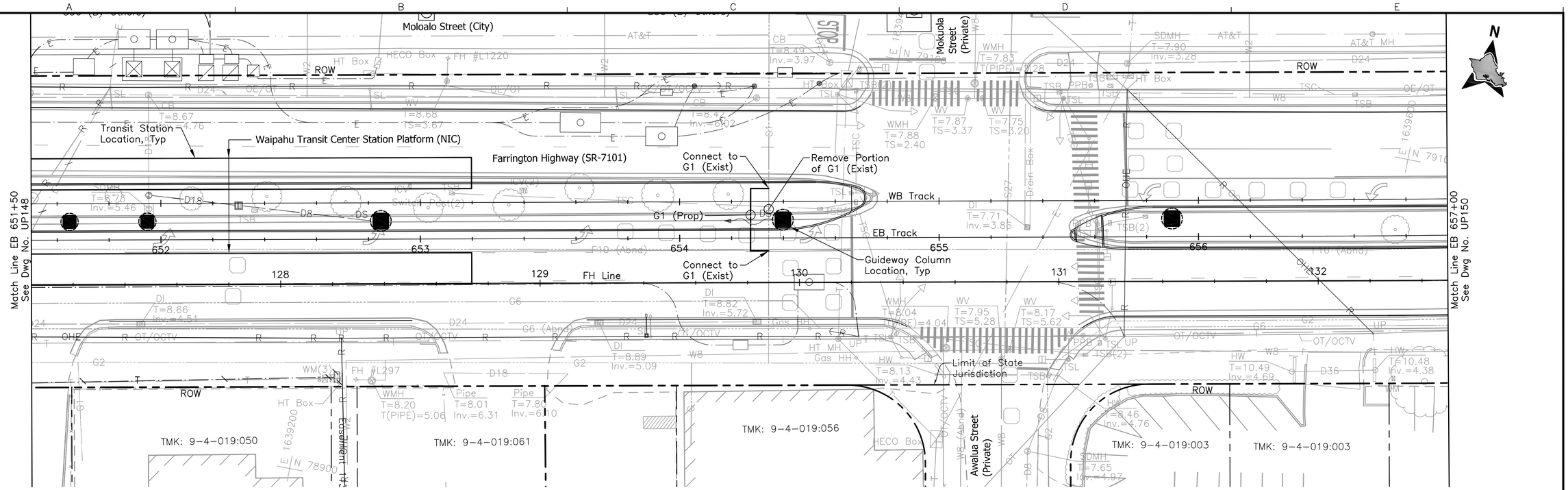
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 646+00 TO EB 651+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP148A
Drawing No.: UP148A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 114 of 314



NOTE:

For drainage relocations, see Drawing No. UP149A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

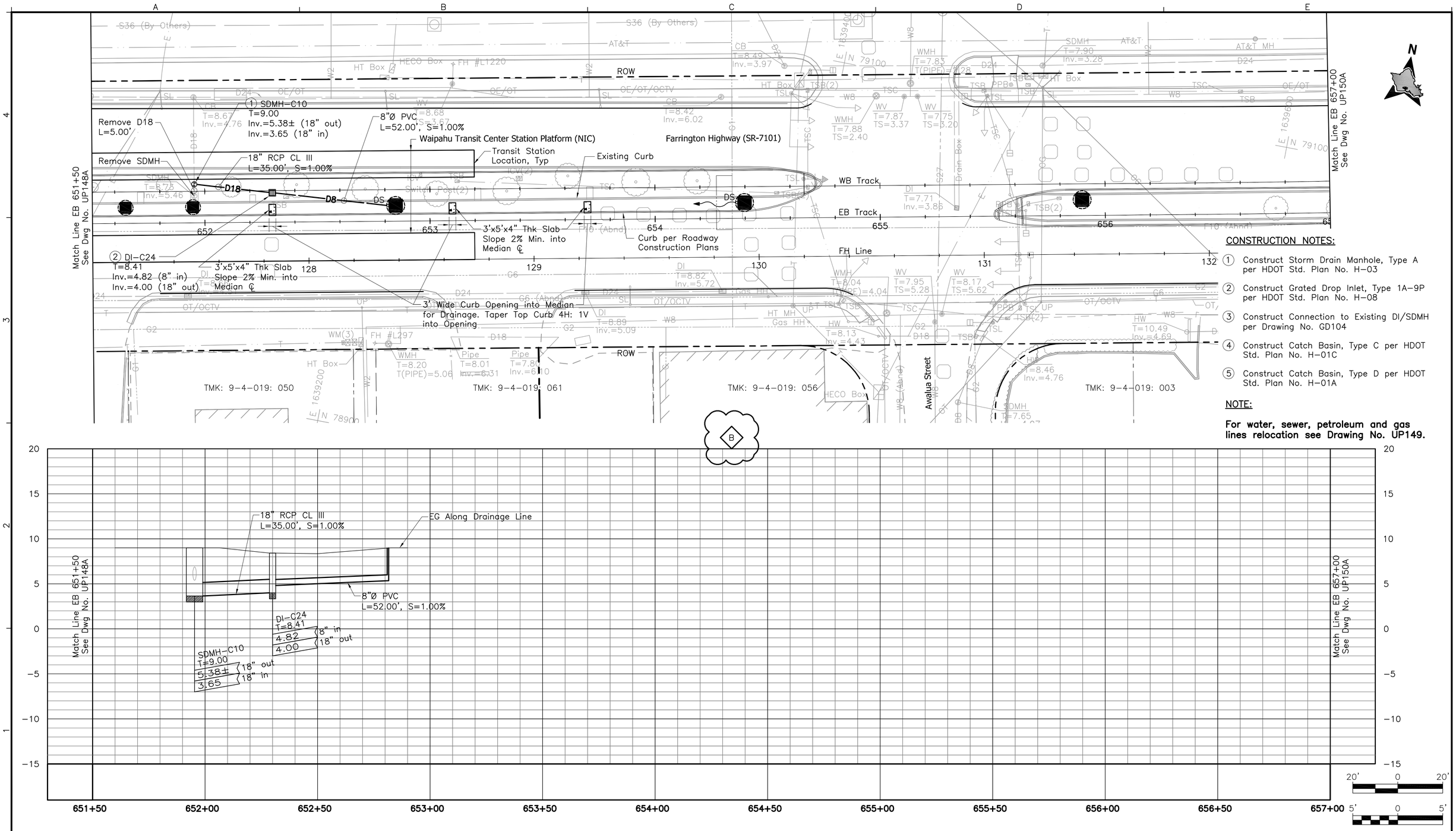
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 651+50 TO EB 657+00 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP149
Drawing No.: UP149 Rev. A
Scale: 1"=20'
Page No. 115 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP149.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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841 Bishop Street, Suite 2006
Honolulu, HI 96813 USA
Voice: (808) 536-6621
Fax: (808) 523-1738
E-mail: adminhi@lyonassociates.com
www.lyonassociates.com

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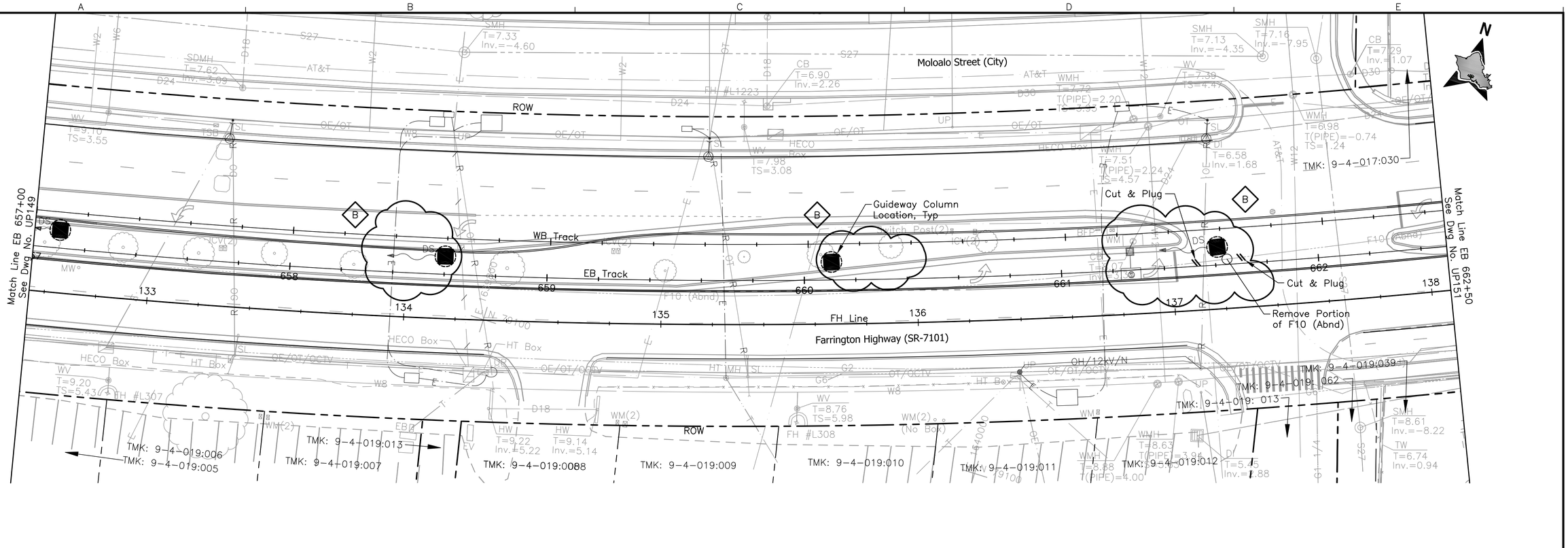
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 651+50 TO EB 657+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP149A
Drawing No.: UP149A Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 116 of 314



NOTE:

For drainage relocations, see Drawing No. UP150A.

20' 0 20'

Rev	By	Date	Description
B	JY	05-22-09	Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

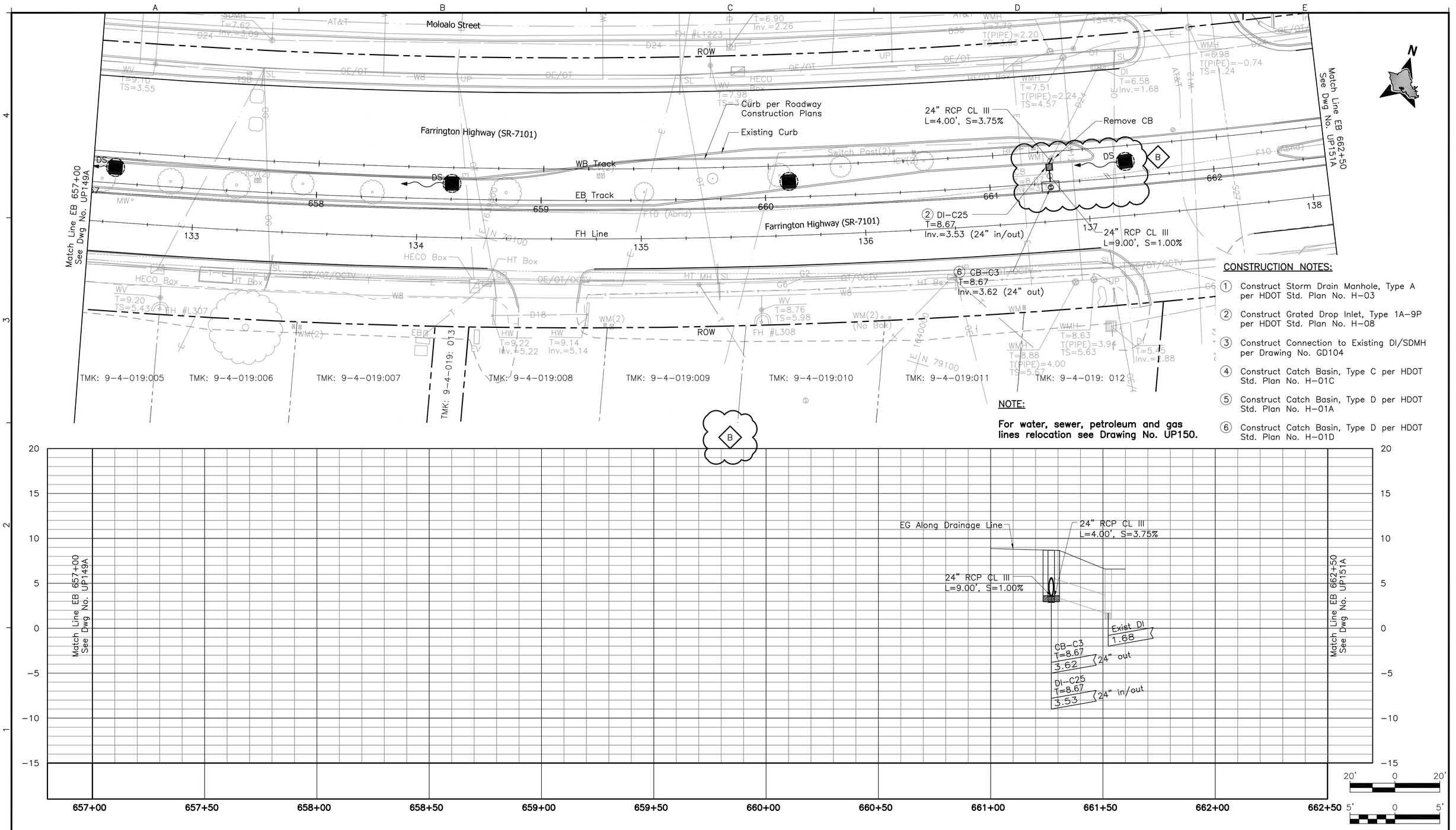
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 657+00 TO EB 662+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP150
Drawing No.: UP150 Rev.: B
Scale: 1"=20'
Page No.: 117 of 314



NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP150.

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A
6. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01D

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Revised Drain Line
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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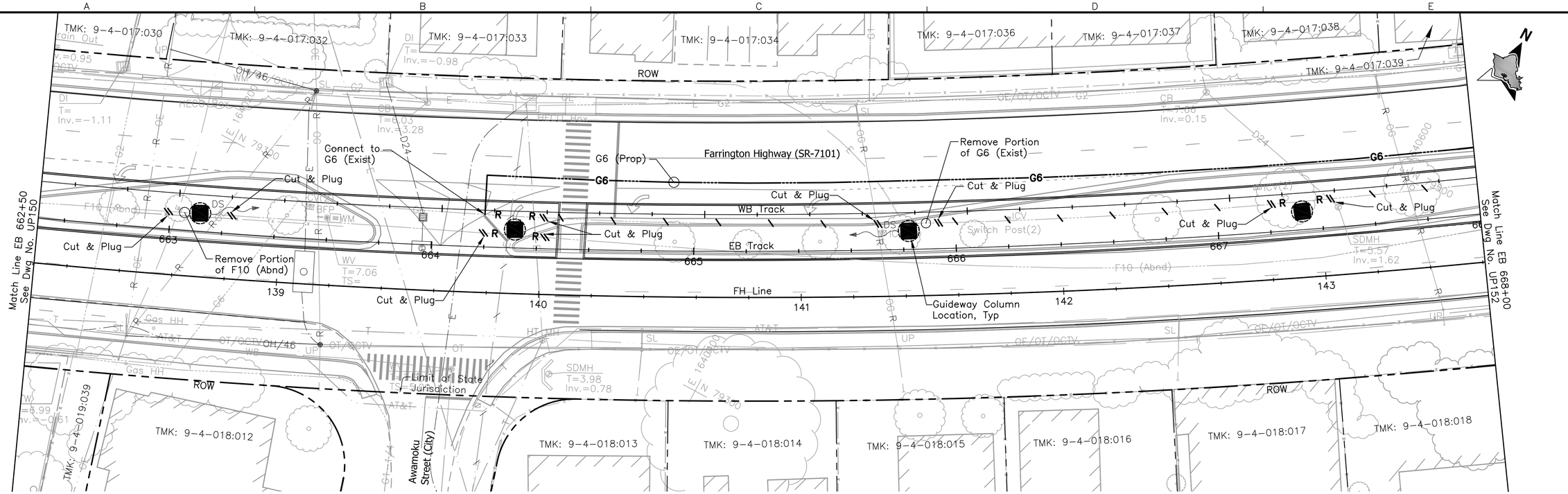
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 657+00 TO EB 662+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP150A
Drawing No.: UP150A
Rev.: B
Scale: 1"=20' H, 1"=5' V



NOTE:

For drainage relocations, see Drawing No. UP151A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Drainage and Electrical Revision
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

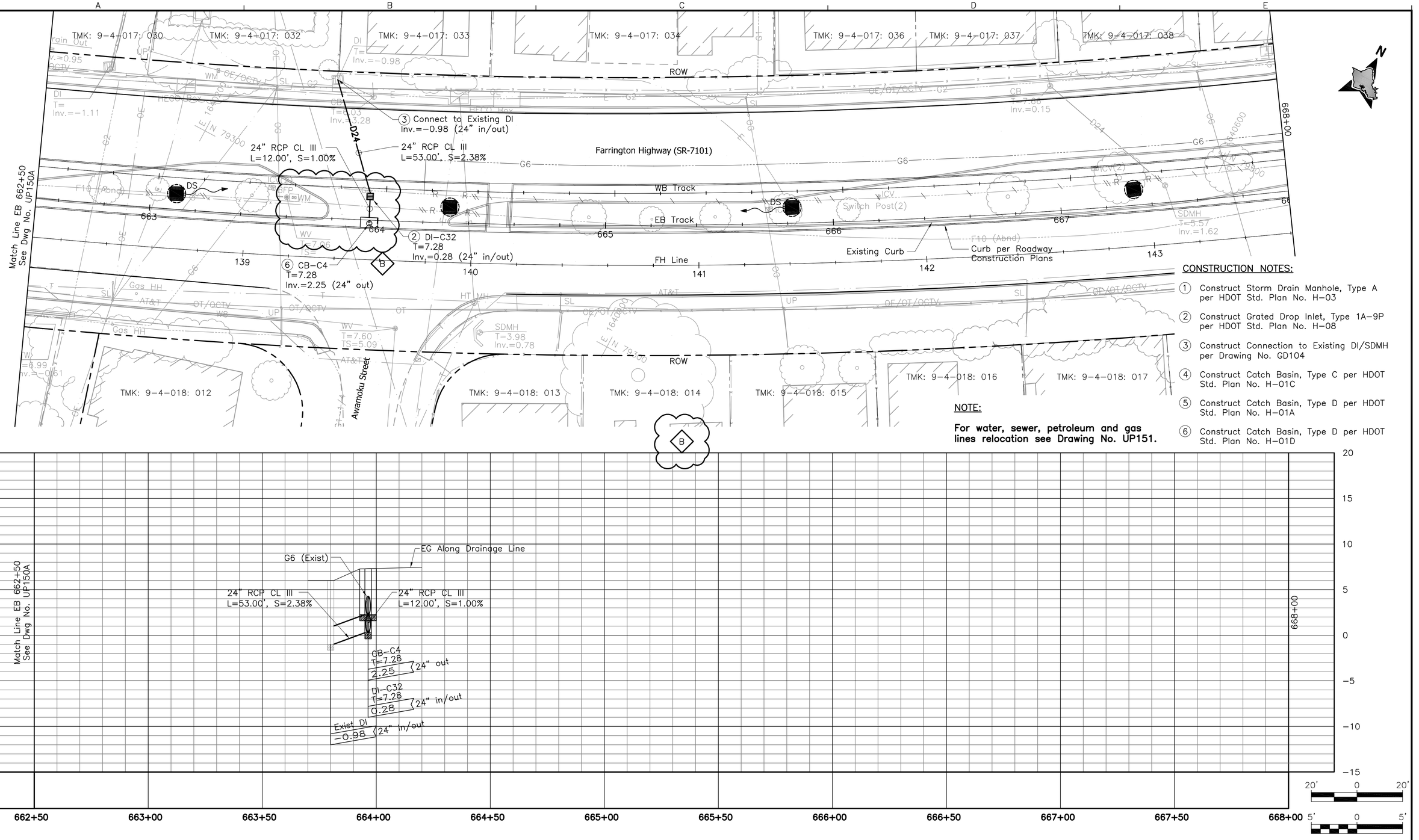
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 662+50 TO EB 668+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP151
Drawing No.: UP151 Rev. B
Scale: 1"=20'
Page No. 119 of 314



NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP151.

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A
6. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01D

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Revised Drain Line
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant: LYON ASSOCIATES
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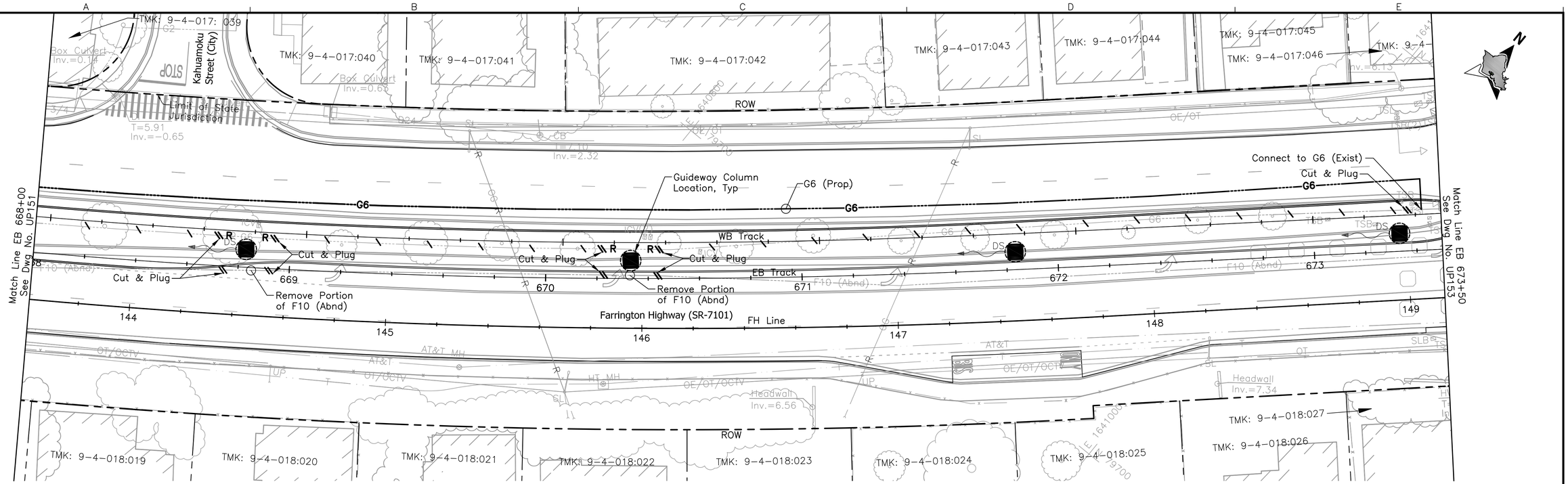
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 662+50 TO EB 668+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP151A
Drawing No.: UP151A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 120 of 314



Rev	By	Date	Description
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

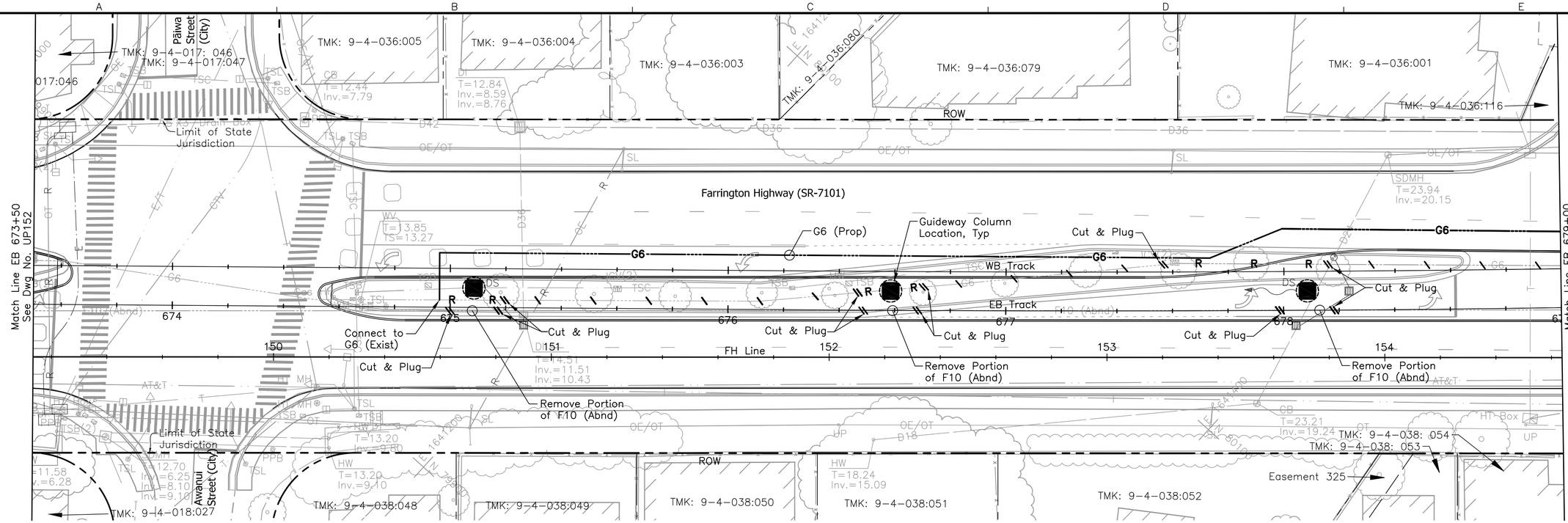
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 668+00 TO EB 673+50 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP152
Drawing No.: UP152 Rev.: A
Scale: 1"=20'
Page No.: 121 of 314



NOTE:

For drainage relocations, see Drawing No. UP153A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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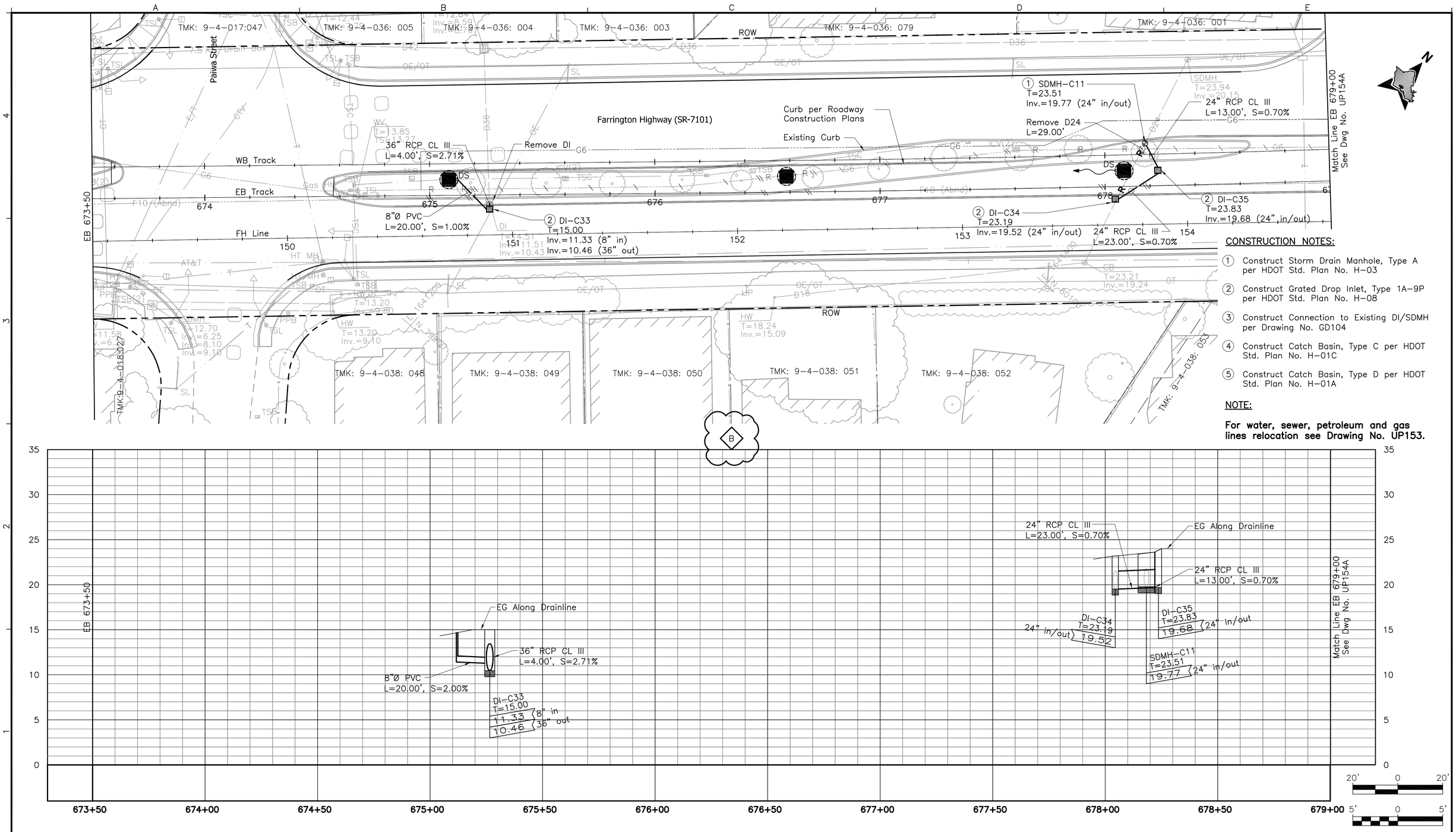
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 673+50 TO EB 679+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP153
Drawing No: UP153 Rev. A
Scale: 1"=20'
Page No. 122 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP153.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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E-mail: adminhi@lyonassociates.com
www.lyonassociates.com

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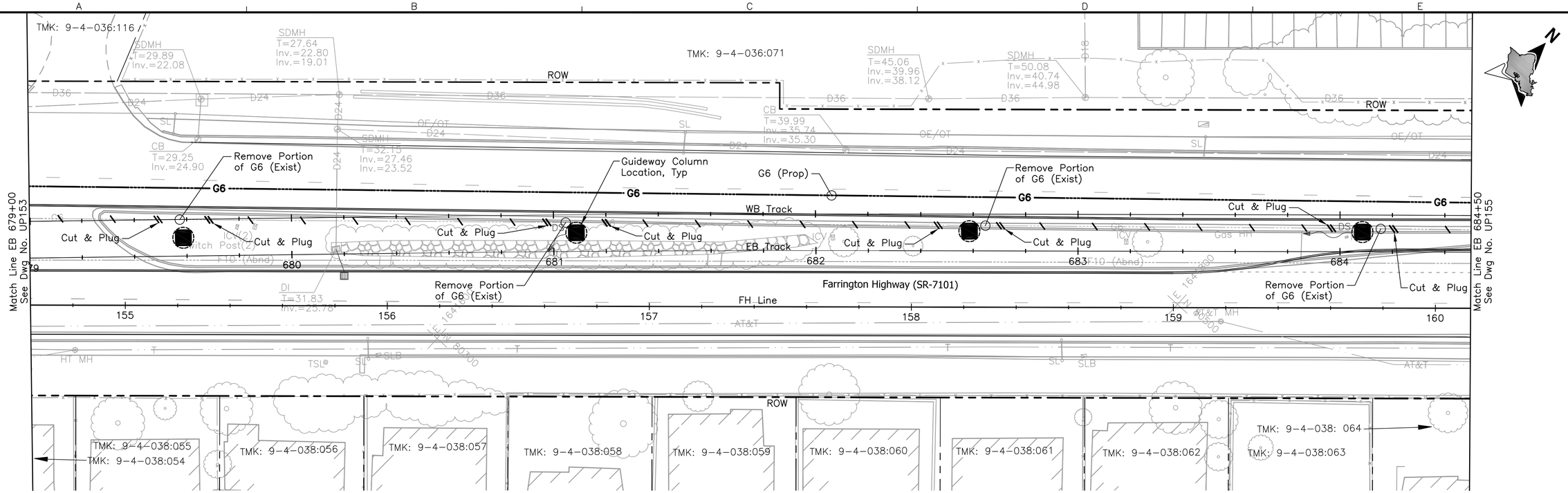
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 673+50 TO EB 679+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP153A
Drawing No.: UP153A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 123 of 314



NOTE:

For drainage relocations, see Drawing No. UP154A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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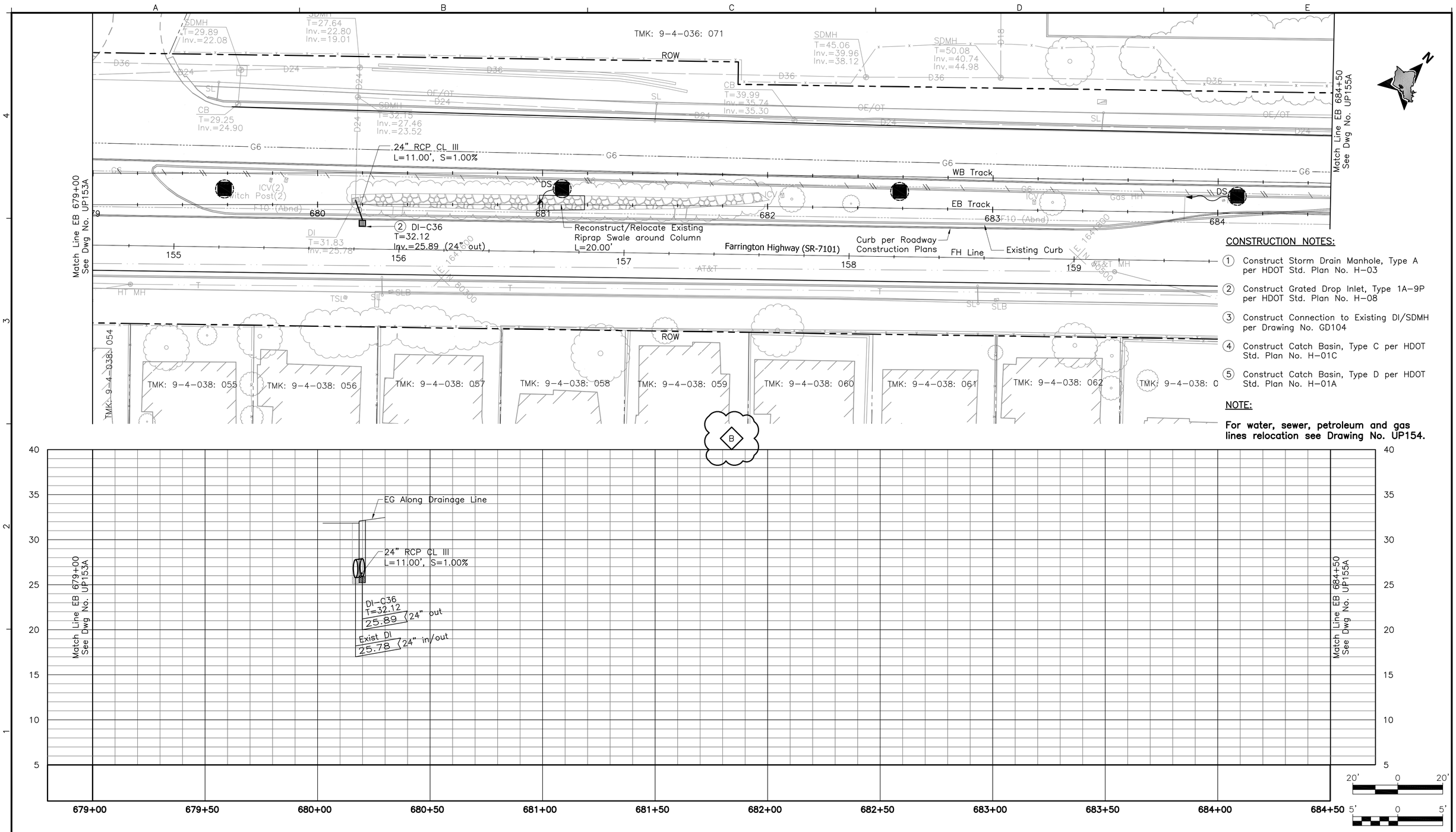
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 679+00 TO EB 684+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP154
Drawing No: UP154 Rev. A
Scale: 1"=20'
Page No. 124 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP154.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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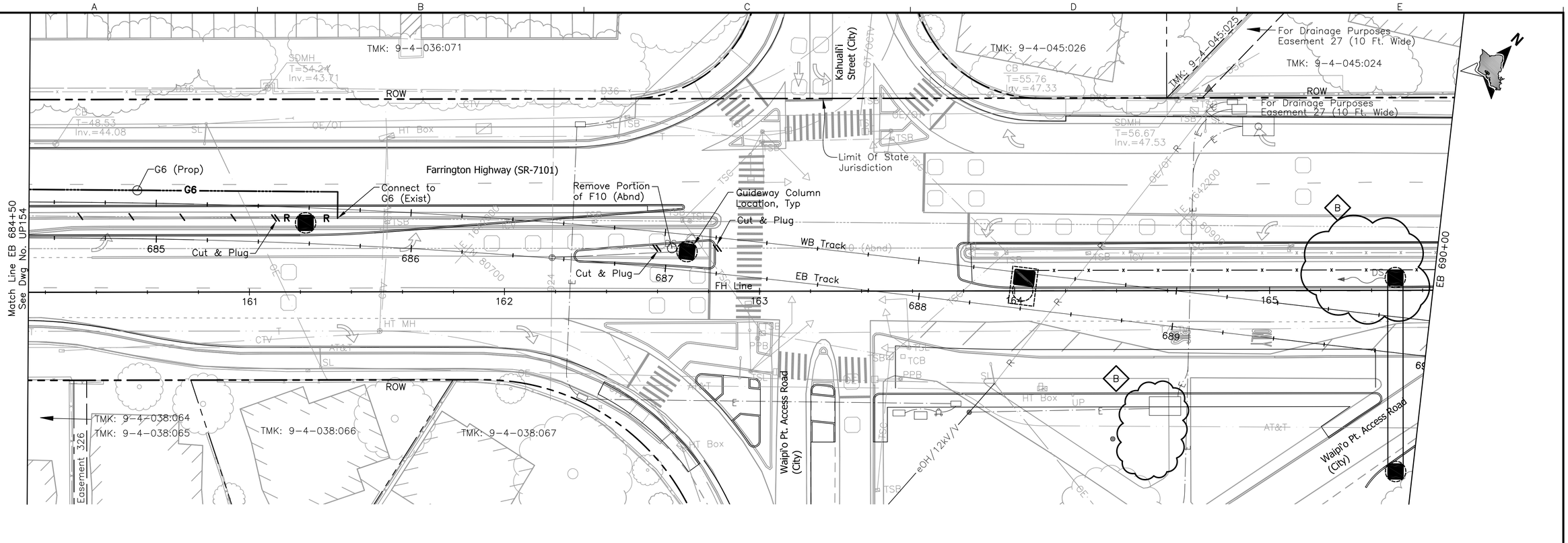
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 679+00 TO EB 684+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP154A
Drawing No.: UP154A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 125 of 314



NOTE:

For drainage relocations, see Drawing No. UP155A.

20' 0 20'

4' 0 4'

Rev	By	Date	Description
B	JY	05-22-09	Drainage and Electrical Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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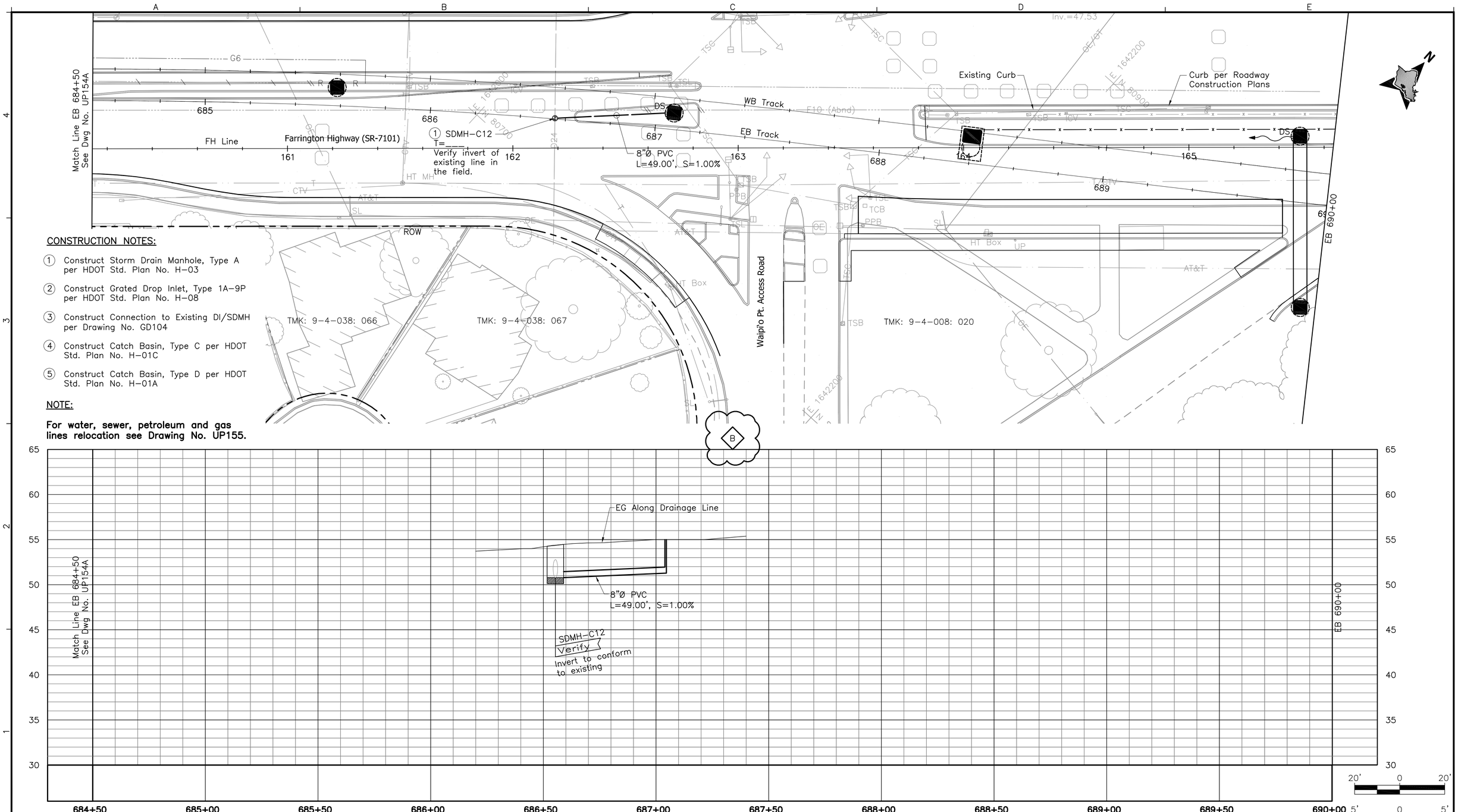
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 684+50 TO EB 690+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP155
Drawing No.: UP155 Rev.: B
Scale: 1"=20'
Page No.: 126 of 314



Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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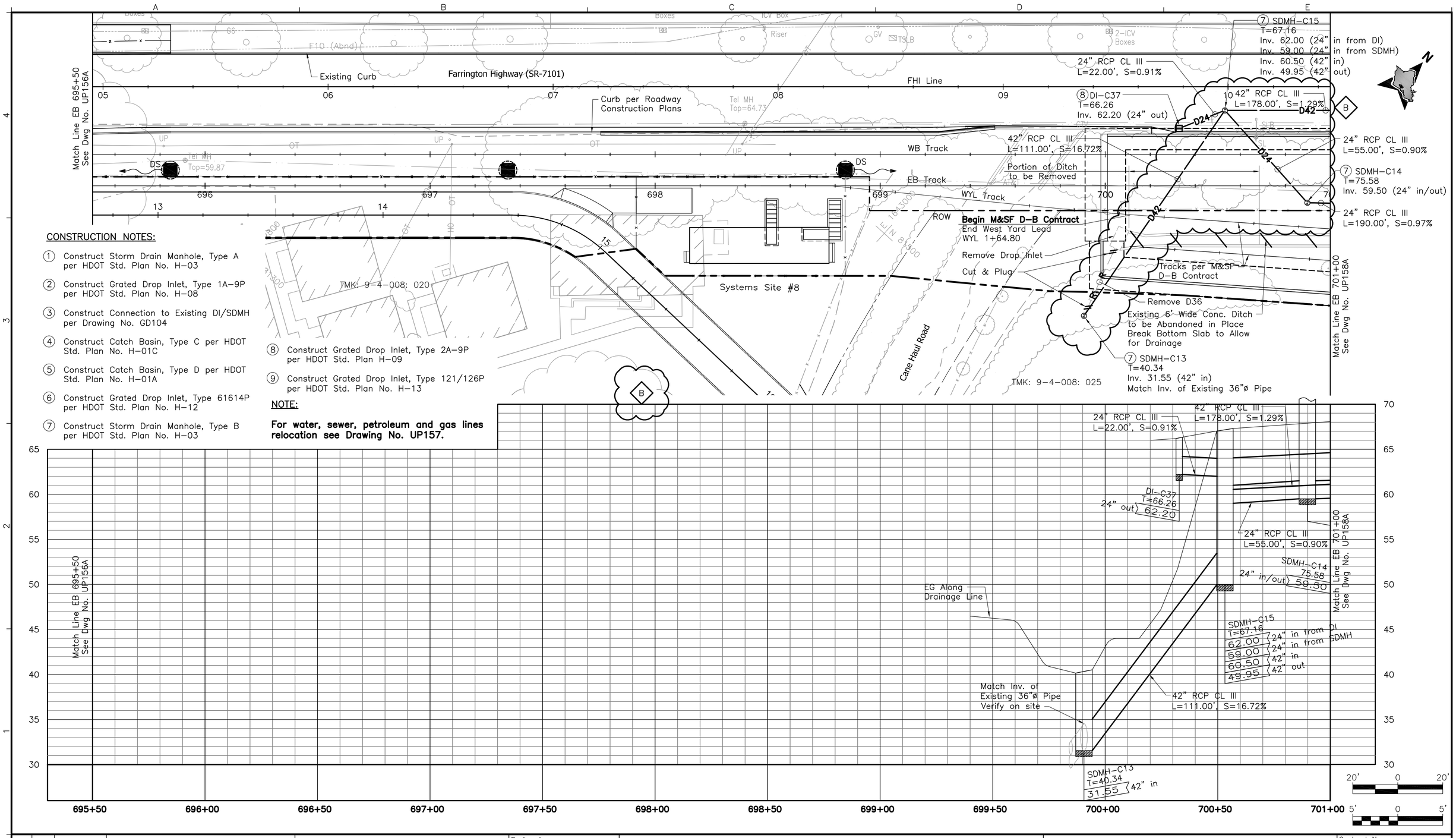
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 684+50 TO EB 690+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP155A
Drawing No.: UP155A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 127 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A
6. Construct Grated Drop Inlet, Type 61614P per HDOT Std. Plan No. H-12
7. Construct Storm Drain Manhole, Type B per HDOT Std. Plan No. H-03
8. Construct Grated Drop Inlet, Type 2A-9P per HDOT Std. Plan H-09
9. Construct Grated Drop Inlet, Type 121/126P per HDOT Std. Plan No. H-13

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP157.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Drain Line Revisions
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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www.lyonassociates.com

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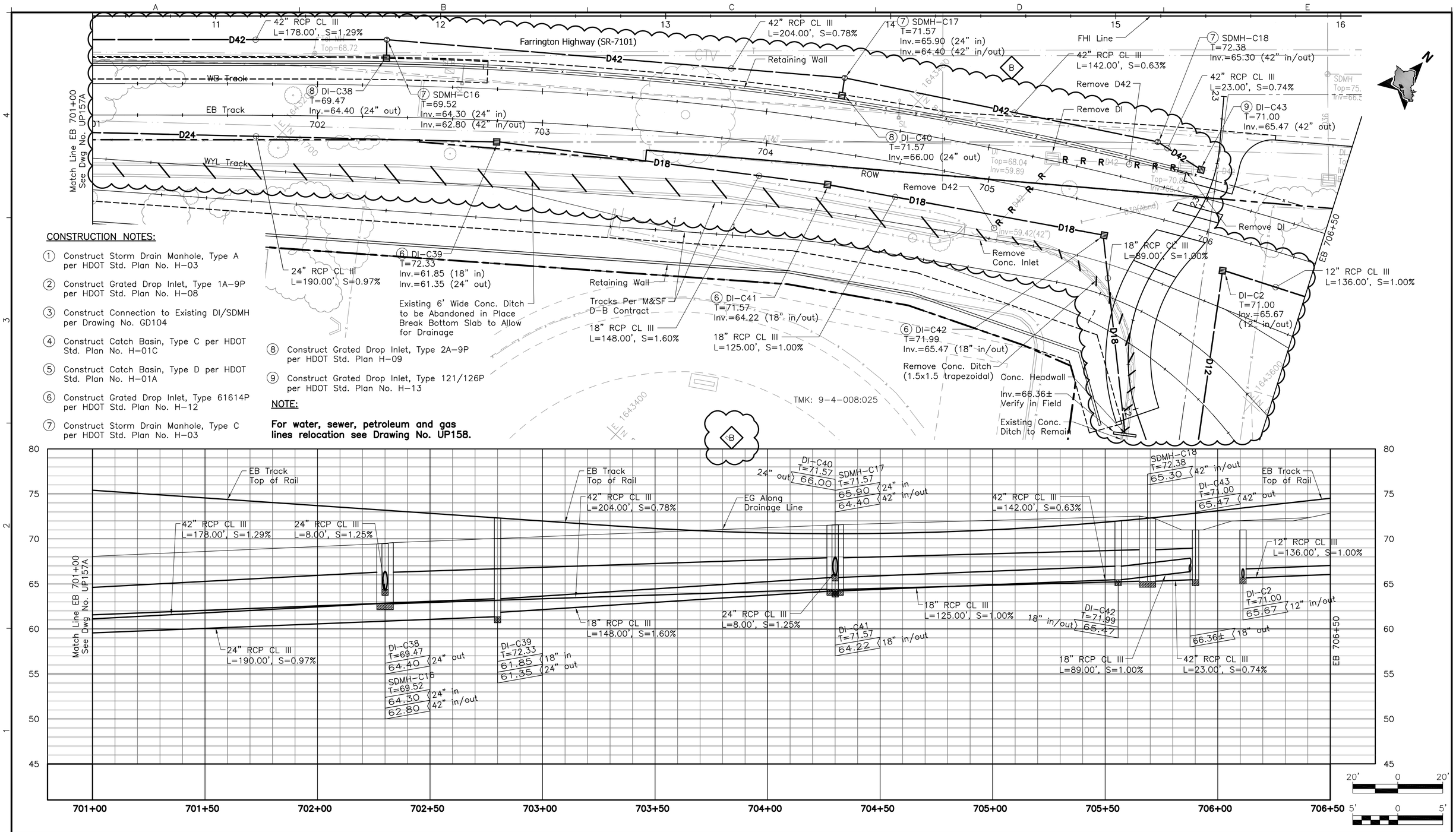
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 695+50 TO EB 701+00 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP157A
Drawing No.: UP157A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 128 of 314



CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A
6. Construct Grated Drop Inlet, Type 61614P per HDOT Std. Plan No. H-12
7. Construct Storm Drain Manhole, Type C per HDOT Std. Plan No. H-03
8. Construct Grated Drop Inlet, Type 2A-9P per HDOT Std. Plan H-09
9. Construct Grated Drop Inlet, Type 121/126P per HDOT Std. Plan No. H-13

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP158.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Drain Line Revisions
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
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www.lyonassociates.com

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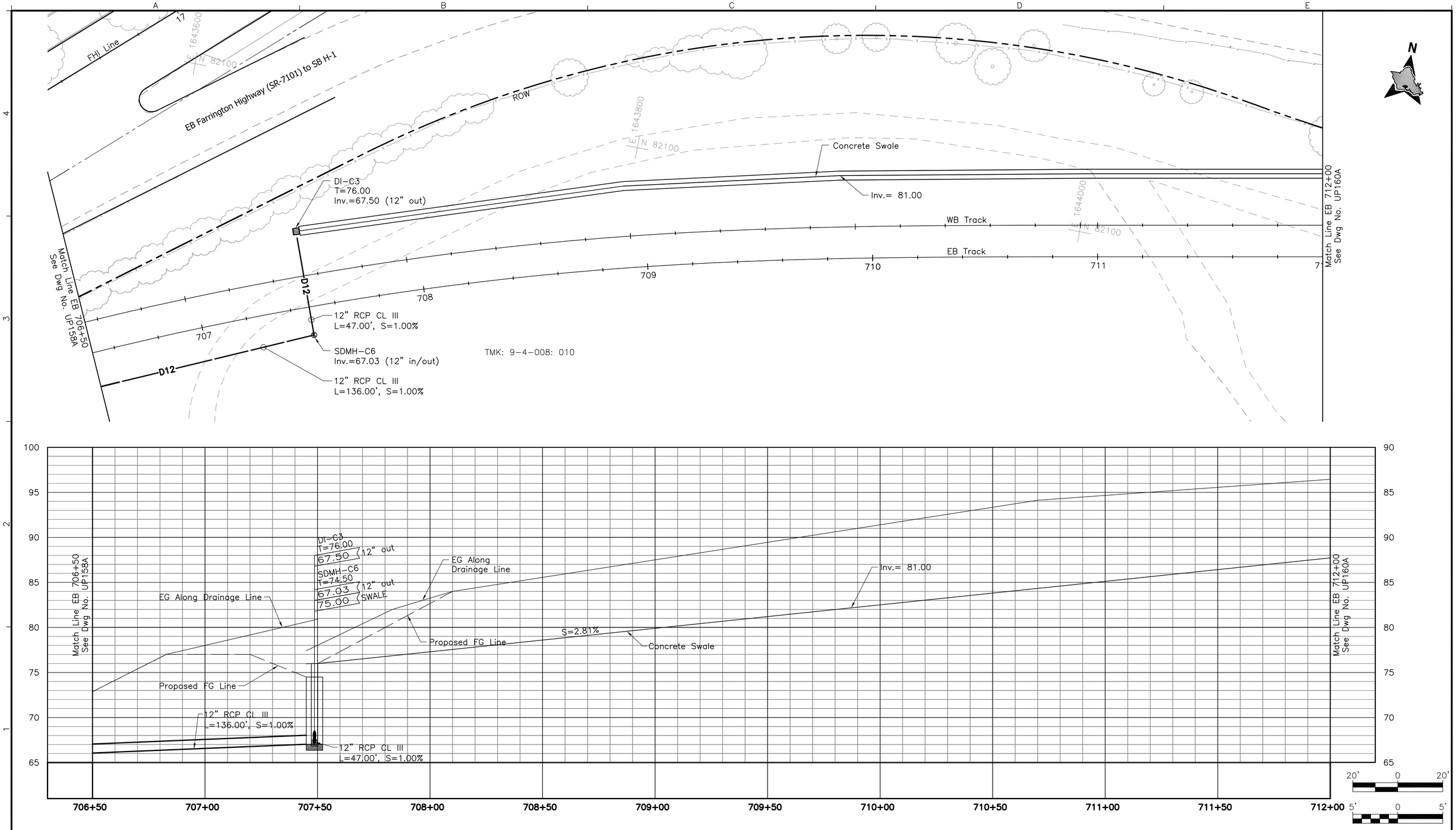
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 701+00 TO EB 706+50 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP158A
Drawing No.: UP158A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 129 of 314



Rev	By	Date	Description
A	MY	05–22–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 05–22–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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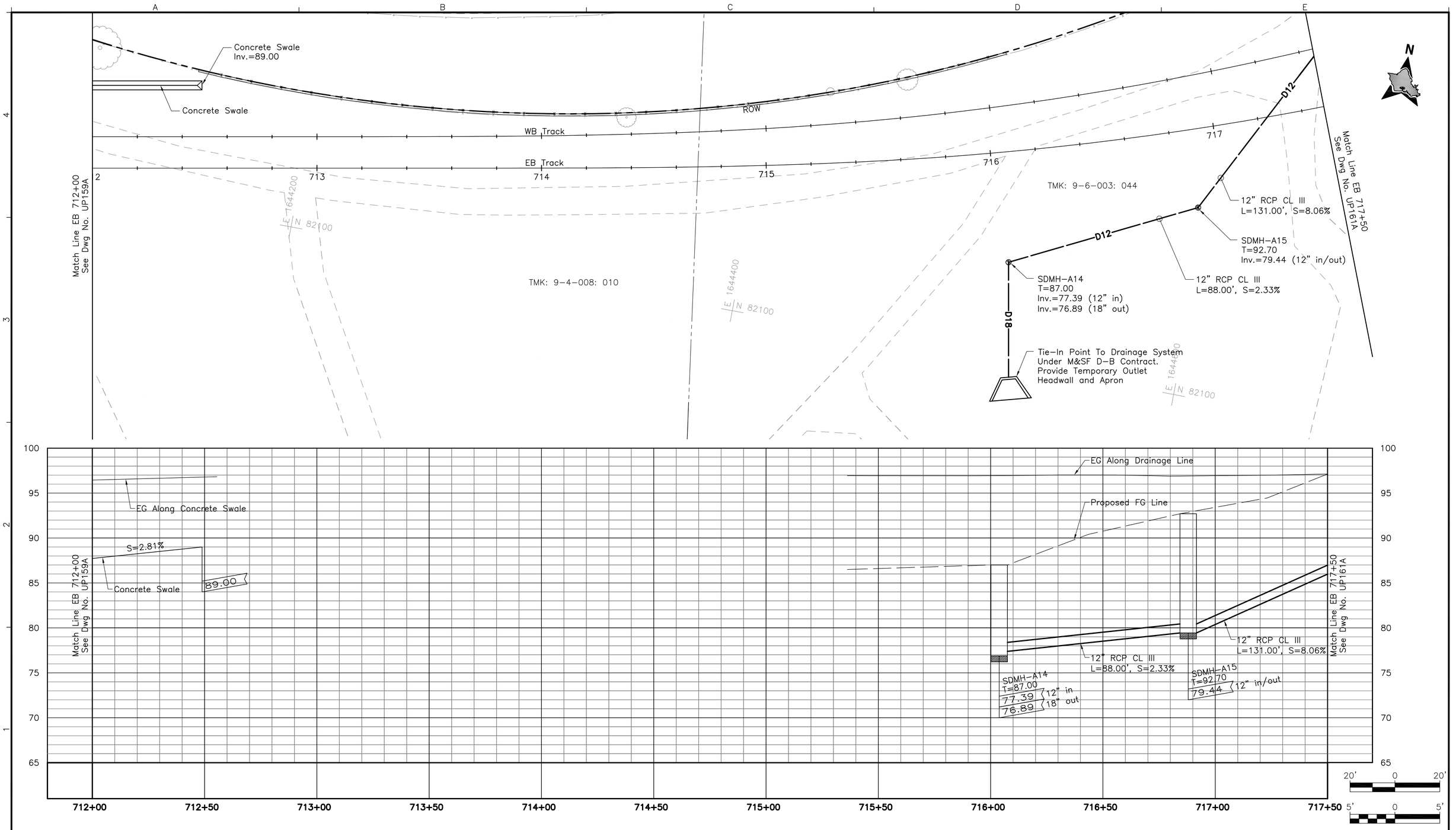
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 706+50 TO EB 712+00 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP159A
Drawing No.: UP159A
Rev.: A
Scale: 1"=20' H, 1"=5' V
Page No.: 130 of 314



Rev	By	Date	Description
A	MY	05-22-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 05-22-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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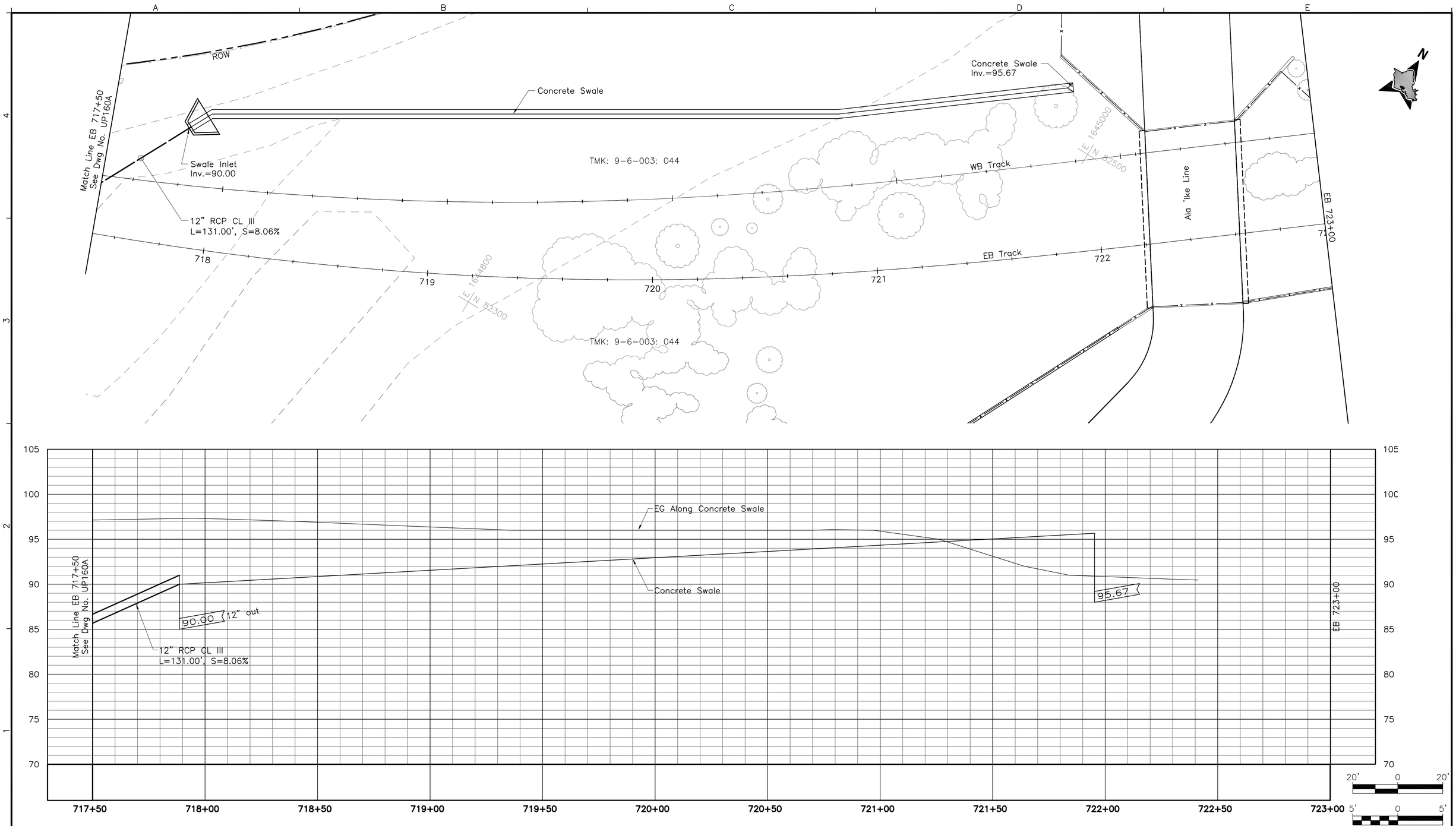
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 712+00 TO EB 717+50 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP160A
Drawing No.: UP160A
Rev.: A
Scale: 1"=20' H, 1"=5' V
Page No.: 131 of 314



Rev	By	Date	Description
A	MY	05-22-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 05-22-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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www.lyonassociates.com

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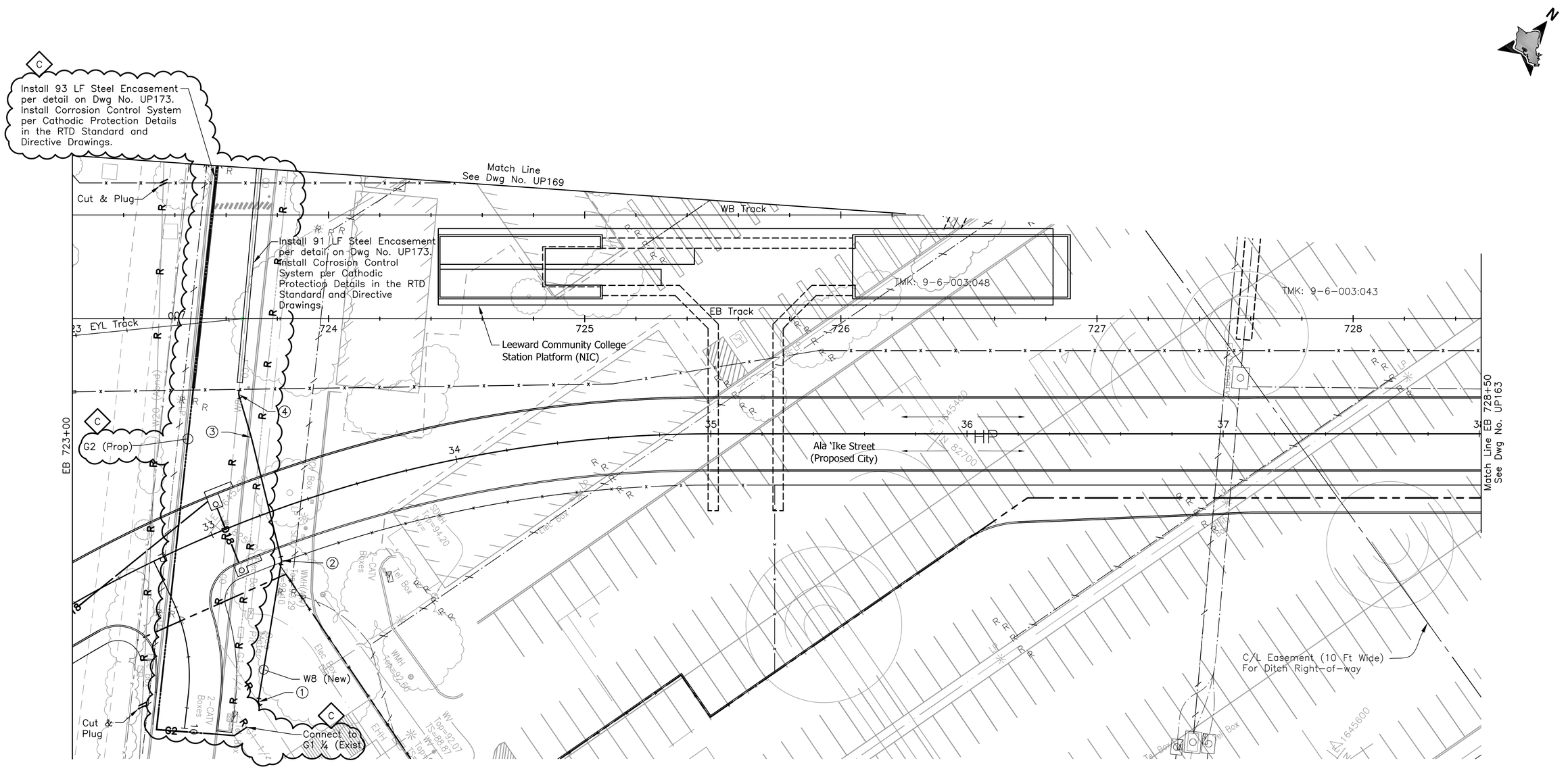
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 717+50 TO EB 723+00 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP161A
Drawing No.: UP161A
Rev.: A
Scale: 1"=20' H, 1"=5' V



① Connect to W8 (Exist)
1–8" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, CL. 52

② 1–8" 1/16 Bend (H), D.I.
1–Conc Blk.

③ Deflect W8 2.5°

④ Connect to W8 (Exist)
1–8" 1/16 Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, CL. 52

Rev	By	Date	Description
C	JY	06–16–09	Revised Gas Line
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
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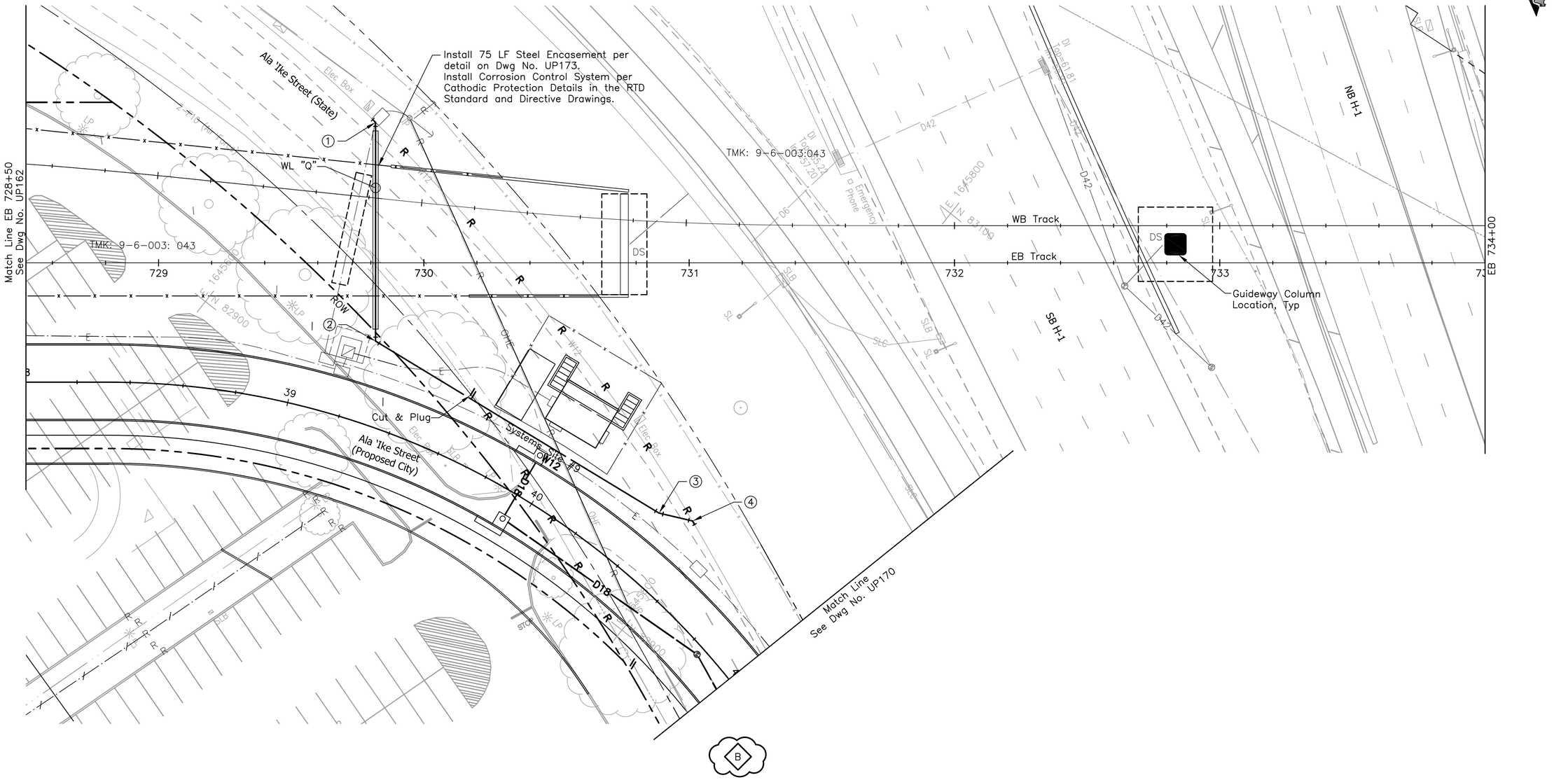
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 723+00 TO EB 728+50 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP162
Drawing No: UP162 Rev. C
Scale: 1"=20'
Page No. 133 of 314



① Connect to W12 (Exist)
1–12" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–12" Sleeve, 15" Long
8± LF 12" D.I. Pipe, CL. 52

② 1–12" ⅛ Bend (H), D.I.
1–12" 1/32 Bend (H), D.I.
1–Conc Blk.

③ 1–12" 1/16 Bend (H), D.I.
1–Conc Blk.

④ Connect to W12 (Exist)
1–12" ⅛ Bend (H), D.I.
1–Conc Blk. w/ Structural Struts
1–12" Sleeve, 15" Long
8± LF 12" D.I. Pipe, CL. 52

20' 0 20'

Rev	By	Date	Description
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

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WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 728+50 TO EB 734+00 SHEET 1 OF 1

Contract No.: DB–1200
CADD File: WF–D03–UP163
Drawing No.: UP163 Rev.: B
Scale: 1"=20'
Page No.: 134 of 314

TMK: 9-6-003:043

8"Ø PVC
L=29.00', S=40.90%

Existing Concrete Ditch

DS

TMK: 9-6-003:043

EB 728+50

729 730 731 732 733

WB Track

EB Track

EB 734+00

Ala 'Ike Line 39

Systems Site #9

Ala 'Ike Street

SB Kamehameha Highway (SR-99)
/ EB Farrington Highway (SR-7101)
to SB H-1

SB H-1

NB H-1

NB H-1 to NB H-1

D42 to be abandoned in place

42" RCP CL III
L=88.00'

Remove D42
L=35.00'

8"Ø PVC
L=22.00', S=1.00%

D42 to be abandoned in place

① SDMH-C18
T=___
Verify invert of existing line in the field.

42" RCP CL III
L=45.00'

① SDMH-C19
T=___
Verify invert of existing line in the field.

CONSTRUCTION NOTES:

1. Construct Storm Drain Manhole, Type A per HDOT Std. Plan No. H-03
2. Construct Grated Drop Inlet, Type 1A-9P per HDOT Std. Plan No. H-08
3. Construct Connection to Existing DI/SDMH per Drawing No. GD104
4. Construct Catch Basin, Type C per HDOT Std. Plan No. H-01C
5. Construct Catch Basin, Type D per HDOT Std. Plan No. H-01A

EG Along Drainage Line

8"Ø PVC
L=29.00', S=40.90%

EG Along Drainage Line

8"Ø PVC
L=22.00', S=1.00%

42" RCP CL III
L=45.00'

42" in/out Exist DI 55.97

42" RCP CL III
L=88.00'

SDMH-C19
Verify (42" in/out
Invert to conform
to existing

SDMH-C18
Verify (42" in/out
Invert to conform
to existing
57.21 (8" in

EB 728+50

EB 734+00

728+50 729+00 729+50 730+00 730+50 731+00 731+50 732+00 732+50 733+00 733+50 734+00

20' 0 20'

5' 0 5'

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: LYON ASSOCIATES
CIVIL ENGINEERING / CONSTRUCTION MANAGEMENT
841 Bishop Street, Suite 2006
Honolulu, HI 96813 USA
Voice: (808) 536-6621
Fax: (808) 523-1738
E-mail: adminhi@lyonassociates.com
www.lyonassociates.com

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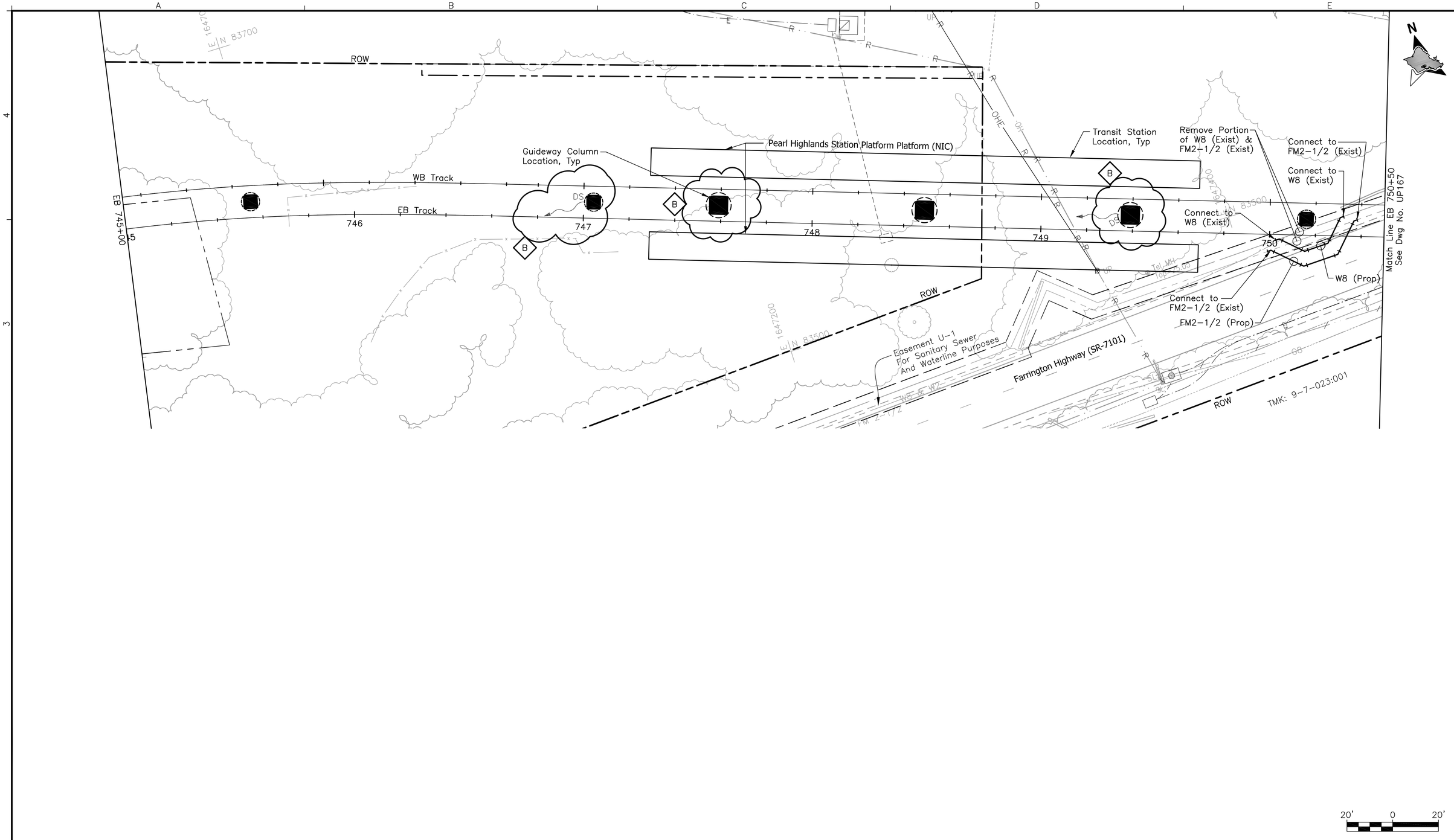
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 728+50 TO EB 734+00 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP163A
Drawing No.: UP163A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 135 of 314



Rev	By	Date	Description
B	JY	05-22-09	Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant:
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1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
R. M. TOWILL CORPORATION
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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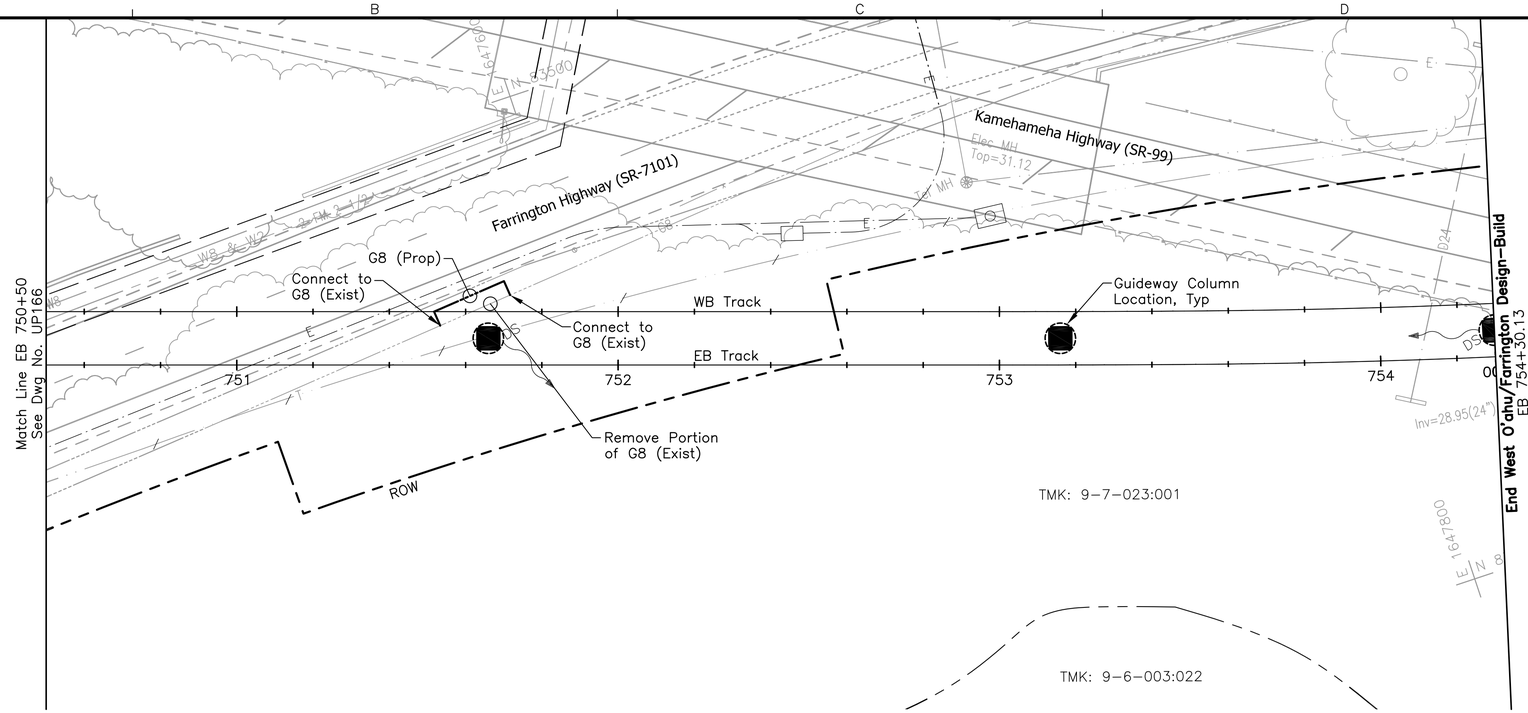
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 745+00 TO EB 750+50 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP166
Drawing No.: UP166 Rev.: B
Scale: 1"=20'
Page No.: 136 of 314



20' 0 20'

4' 0 4'

Rev	By	Date	Description
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819-3470

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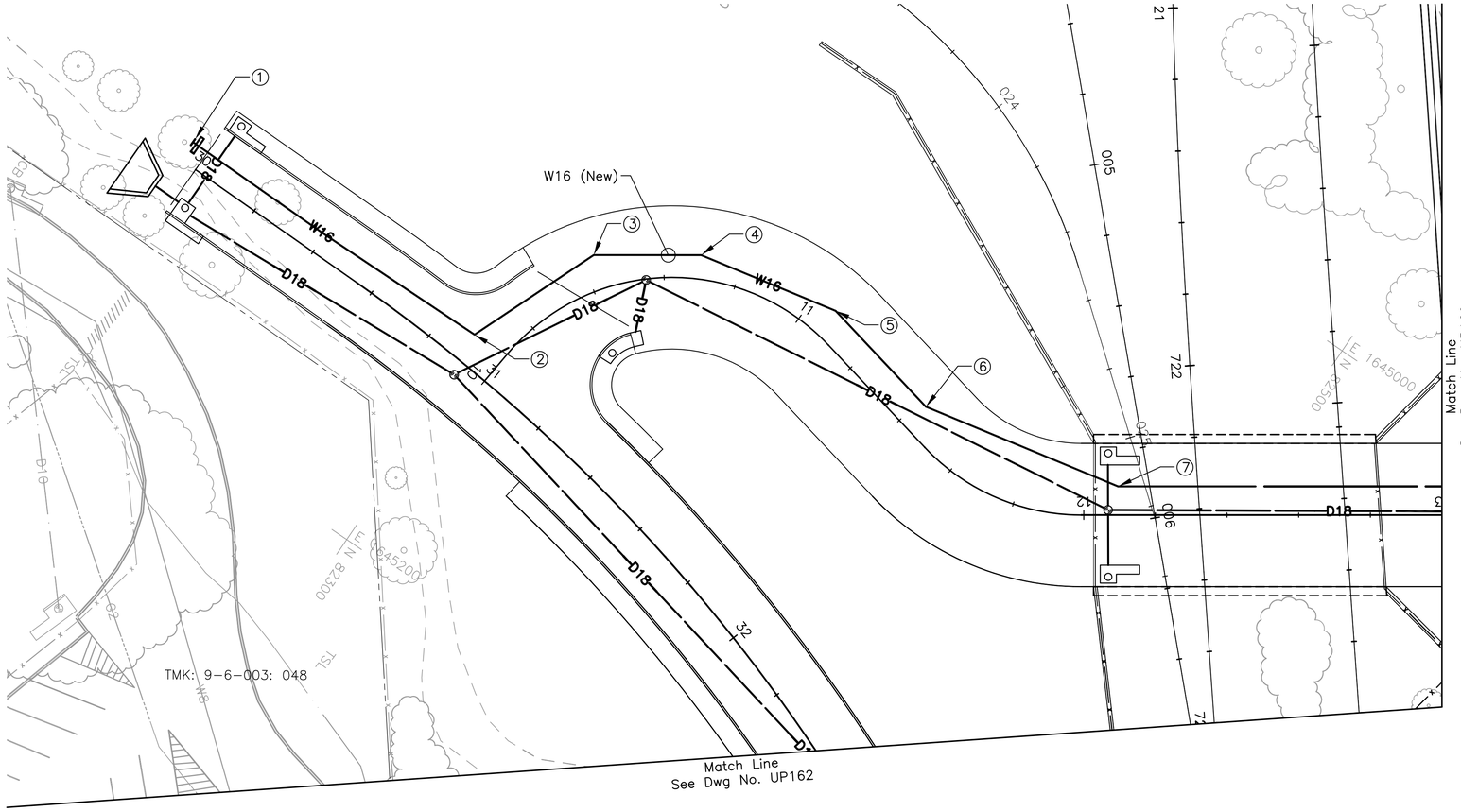
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

EB 750+50 TO EB 754+30.13 SHEET 1 OF 1

Contract No.: DB-1200
CADD File: WF-D03-UP167
Drawing No.: UP167 Rev.: A
Scale: 1"=20'



① 1–16" Cap, D.I. w/ 4" C.O.
1–Conc Beam w/ Reverse Bell Pipe
1–Conc Blk.

② 1–16" ⅛ Bend (H), D.I.
1–16" 1/16 Bend (H), D.I.
1–Conc Blk.

③ 1–16" 1/16 Bend (H), D.I.
1–16" 1/32 Bend (H), D.I.
1–Conc Blk.

④ 1–16" 1/16 Bend (H), D.I.
1–Conc Blk.

⑤ 1–16" 1/16 Bend (H), D.I.
1–Conc Blk.

⑥ 1–16" 1/16 Bend (H), D.I.
1–Conc Blk.

⑦ 1–16" 1/16 Bend (H), D.I.
1–Conc Blk.

NOTE:

For drainage relocations, see Drawing No. UP168A.

20' 0 20'

Rev	By	Date	Description
A	JY	05–22–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 05–22–09

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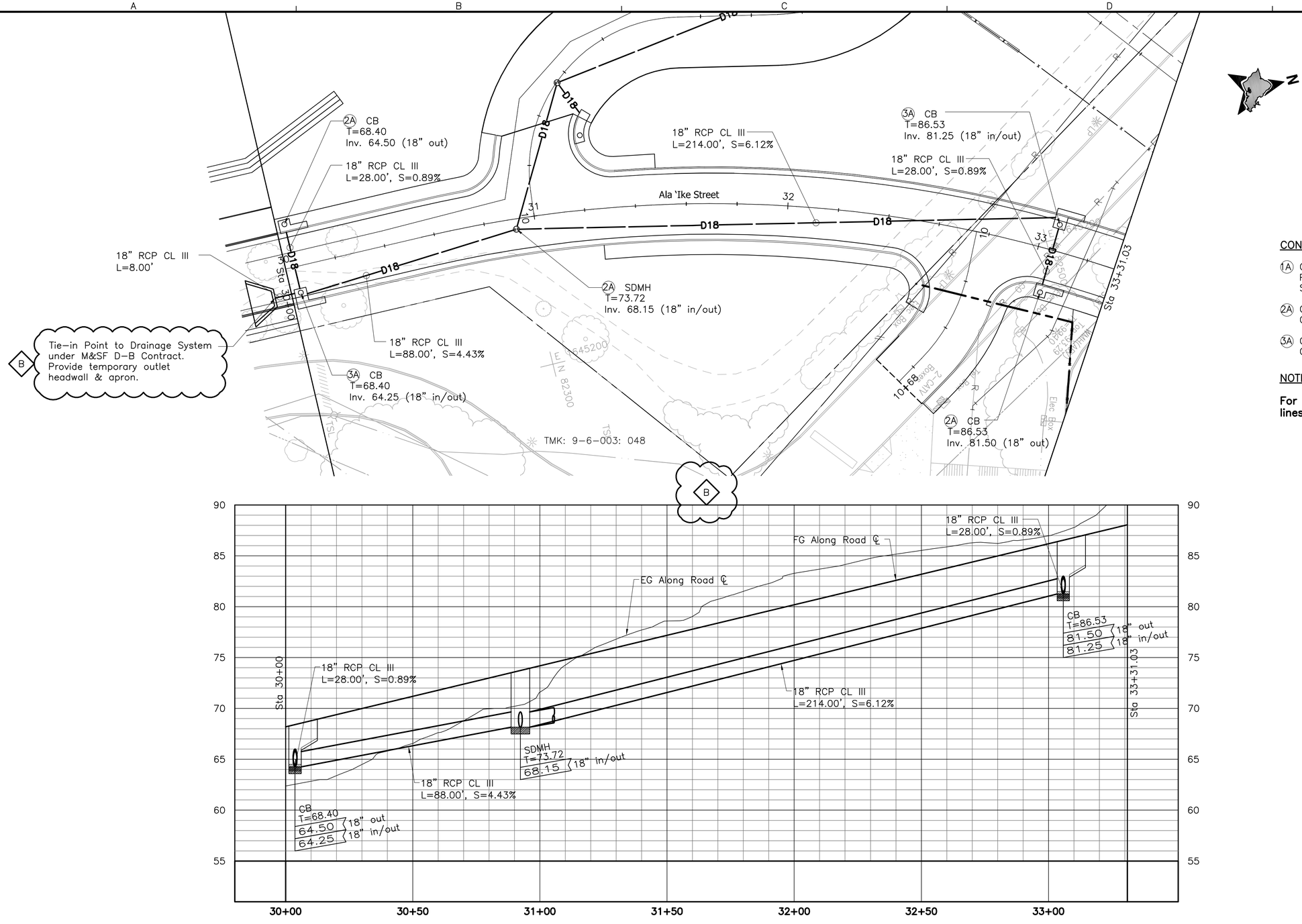
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

ALA `IKE ST STA 30+00 TO STA 33+31.03 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP168
Drawing No.: UP168 Rev. A
Scale: 1"=20'
Page No. 138 of 314



CONSTRUCTION NOTES:

1A Construct Storm Drain Manhole for Pavement Area per C&C of Honolulu Std. Detail No. D-18

2A Construct Catch Basin, Type A per C&C of Honolulu Std. Detail No. D-1

3A Construct Catch Basin, Type B per C&C of Honolulu Std. Detail No. D-5

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP168.

20' 0 20'

5' 0 5'

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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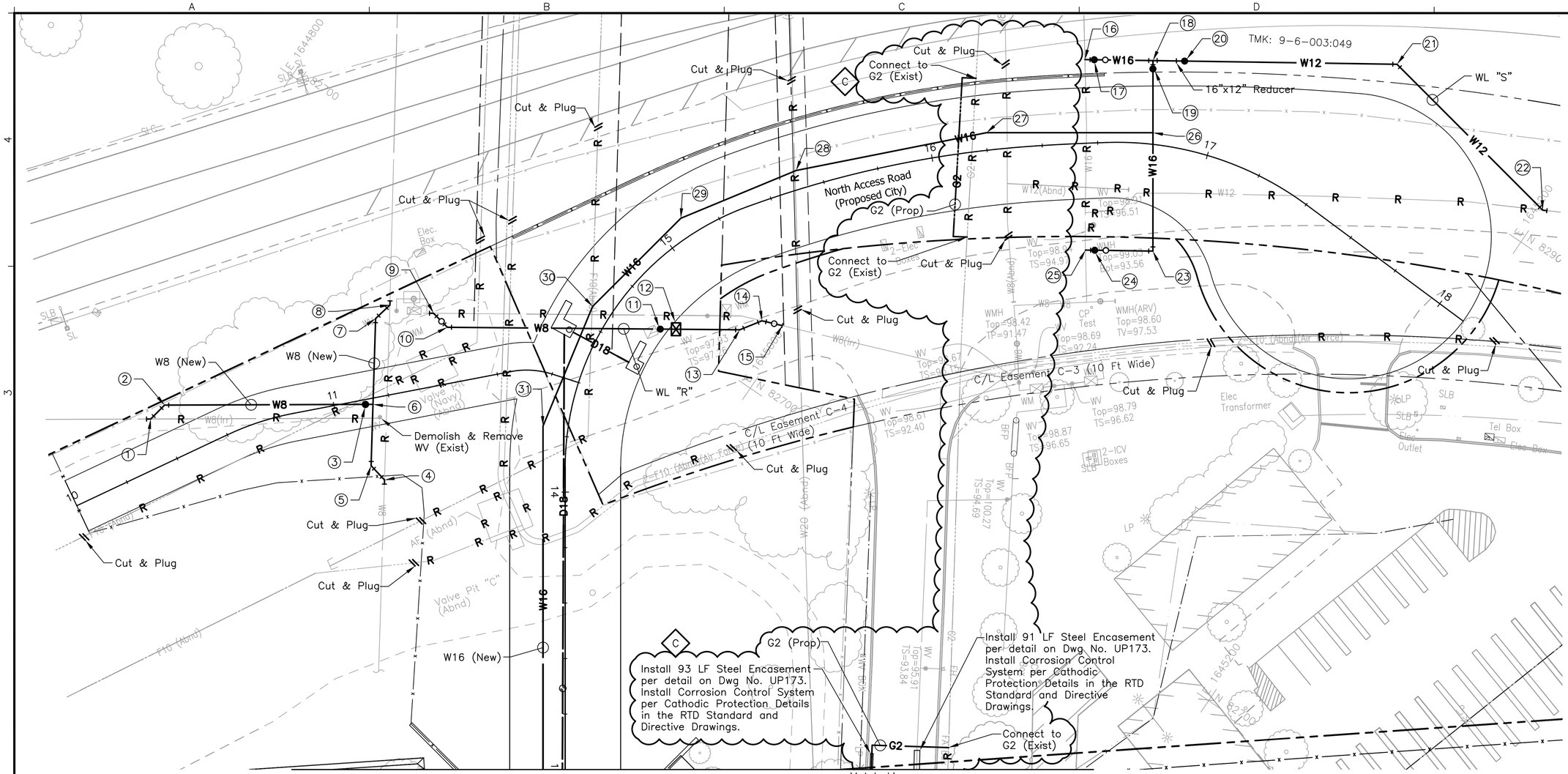
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

ALA 'IKE ST STA 30+00 TO STA 33+31.03 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP168A
Drawing No: UP168A Rev. B
Scale: 1"=20' H, 1"=5' V
Page No. 139 of 314



① Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, Cl. 52

② 1–8" ⅛ Bend (H)
1–Conc Blk.

③ 1–WV
1–Valve Box

④ Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, Cl. 52

⑤ 1–8" ⅛ Bend (H)
1–Conc Blk.

⑥ 1–8" Tee
1–Conc Blk.

⑦ 1–8" ⅛ Bend (H)
1–Conc Blk.

⑧ Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, Cl. 52

⑨ STA 14+44.96 N. Access '
O/S 57.56' Lt.
=0+00 WL "R"
Connect to W8 (Exist)
1–8" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, Cl. 52

⑩ STA 14+42.99 N. Access ', O/S 51.17' Lt.
=0+07.07 WL "R"
1–8" ⅛ Bend (H)
1–Conc Blk.

⑪ STA 14+73.80 N. Access ', O/S 17.55' Rt.
=0+83.86 WL "R"
1–WV
1–Valve Box

⑫ STA 14+78.14 N. Access ', O/S 22.03' Rt.
=0+89.53 WL "R"
Relocate WM

⑬ STA 15+01.82 N. Access ', O/S 38.14' Rt.
=1+12.53 WL "R"
1–8" ⅛ Bend (H)
1–Conc Blk.

⑭ STA 15+15.75 N. Access ', O/S 39.76' Rt.
=1+21.18 WL "R"
1–8" ⅛ Bend (H)
1–Conc Blk.

⑮ STA 15+25.79 N. Access ', O/S 44.52' Lt.
=1+28.67 WL "R"
Connect to W8 (Exist)
1–8" Sleeve, 15" Long
8± LF 8" D.I. Pipe, Cl. 52

⑯ STA 16+56.64 N. Access ', O/S 30.14' Lt.
=0+00 WL "S"
Connect to W8 (Exist)
1–16"x16" Tee
1–Conc Blk. w/ Structural Struts
2–8" Sleeve, 15" Long
16± LF 8" D.I. Pipe, Cl. 52

⑰ STA 16+59.86 N. Access ', O/S 29.96' Lt.
=0+03.35 WL "S"
1–Type "A" WMH
1–16" BGGV. CL. 150, FE
1–16" Flanged Dismanteling Joint
2–16" Flanged Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

⑱ STA 16+77.27 N. Access '
O/S 30.03' Lt.
=0+24.53 WL "S"
1–16"x16" Tee
1–Conc Blk.

⑲ STA 16+77.47 N. Access '
O/S 27.04' Lt.
=0+24.53 WL "S"
1–Type "A" WMH
1–16" BGGV. CL. 150, FE
1–16" Flanged Dismanteling Joint
2–16" Flanged Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

⑳ STA 16+86.22 N. Access '
O/S 31.33' Lt.
=0+35.95 WL "S"
1–12" GV, 150#
1–Valve Box

㉑ STA 17+37.61 N. Access '
O/S 60.18' Lt.
=1+12.54 WL "S"
1–12" ⅛ Bend (H)
1–Conc Blk.

㉒ STA 16+57.42 N. Access '
O/S 49.20' Lt.
=1+86.89 WL "S"
Connect to W12 (Exist)
1–12" ⅛ Bend (H)
1–Conc Blk. w/ Structural Struts
1–12" Sleeve, 15" Long
8± LF 12" D.I. Pipe, Cl. 52

㉓ STA 16+86.46 N. Access '
O/S 38.11' Lt.
=0+24.32
1–12" ¼ Bend (H)
1–Conc Blk.

㉔ STA 18+09.73 N. Access '
O/S 38.66' Lt.
=0+03.35
1–Type "A" WMH
1–16" BGGV. CL. 150, FE
1–16" Flanged Dismanteling Joint
2–16" Flanged Adapter, FxB
2–Conc Capping Collar
1–Valve Marker

㉕ STA 16+53.90 N. Access '
O/S 38.47' Lt.
=0+00
Connect to W16 (Exist)
1–16"x16" Tee
1–Conc Blk. w/ Structural Struts
2–8" Sleeve, 15" Long
16± LF 8" D.I. Pipe, Cl. 52

㉖ 1–16"x16" Tee
1–Conc Blk.

㉗ 1–16" ⅛ Bend (H), D.I.
1–Conc Blk.

㉘ 1–16" ⅛ Bend (H), D.I.
1–Conc Blk.

㉙ 1–16" ⅛ Bend (H), D.I.
1–Conc Blk.

㉚ 1–16" ⅛ Bend (H), D.I.
1–Conc Blk.

㉛ 1–16" ⅛ Bend (H), D.I.
1–Conc Blk.

NOTE:

For drainage relocations, see Drawing No. UP169A.

20' 0 20'

Rev	By	Date	Description
C	JY	06–16–09	Revised Gas Line
B	JY	05–22–09	Misc. Revisions
A	JY	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant: R. M. TOWILL CORPORATION
Planning – Engineering – Environmental Services – Photogrammetry – Surveying – Construction Management
808 842 1133 2024 North King Street Suite 200 Honolulu Hawaii 96819–3470

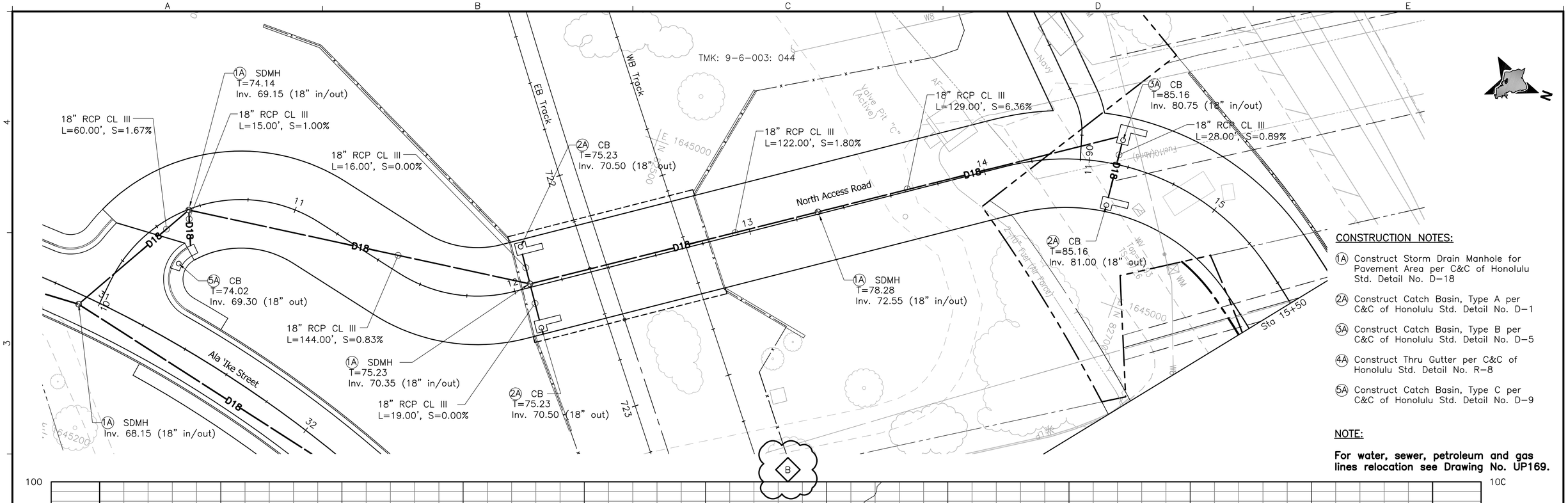
For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

NORTH ACCESS RD STA 13+00 TO STA 18+10.51 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP169
Drawing No.: UP169 Rev.: C
Scale: 1"=20'
Page No.: 140 of 314



CONSTRUCTION NOTES:

(1A) Construct Storm Drain Manhole for Pavement Area per C&C of Honolulu Std. Detail No. D-18

(2A) Construct Catch Basin, Type A per C&C of Honolulu Std. Detail No. D-1

(3A) Construct Catch Basin, Type B per C&C of Honolulu Std. Detail No. D-5

(4A) Construct Thru Gutter per C&C of Honolulu Std. Detail No. R-8

(5A) Construct Catch Basin, Type C per C&C of Honolulu Std. Detail No. D-9

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP169.

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Misc. Update
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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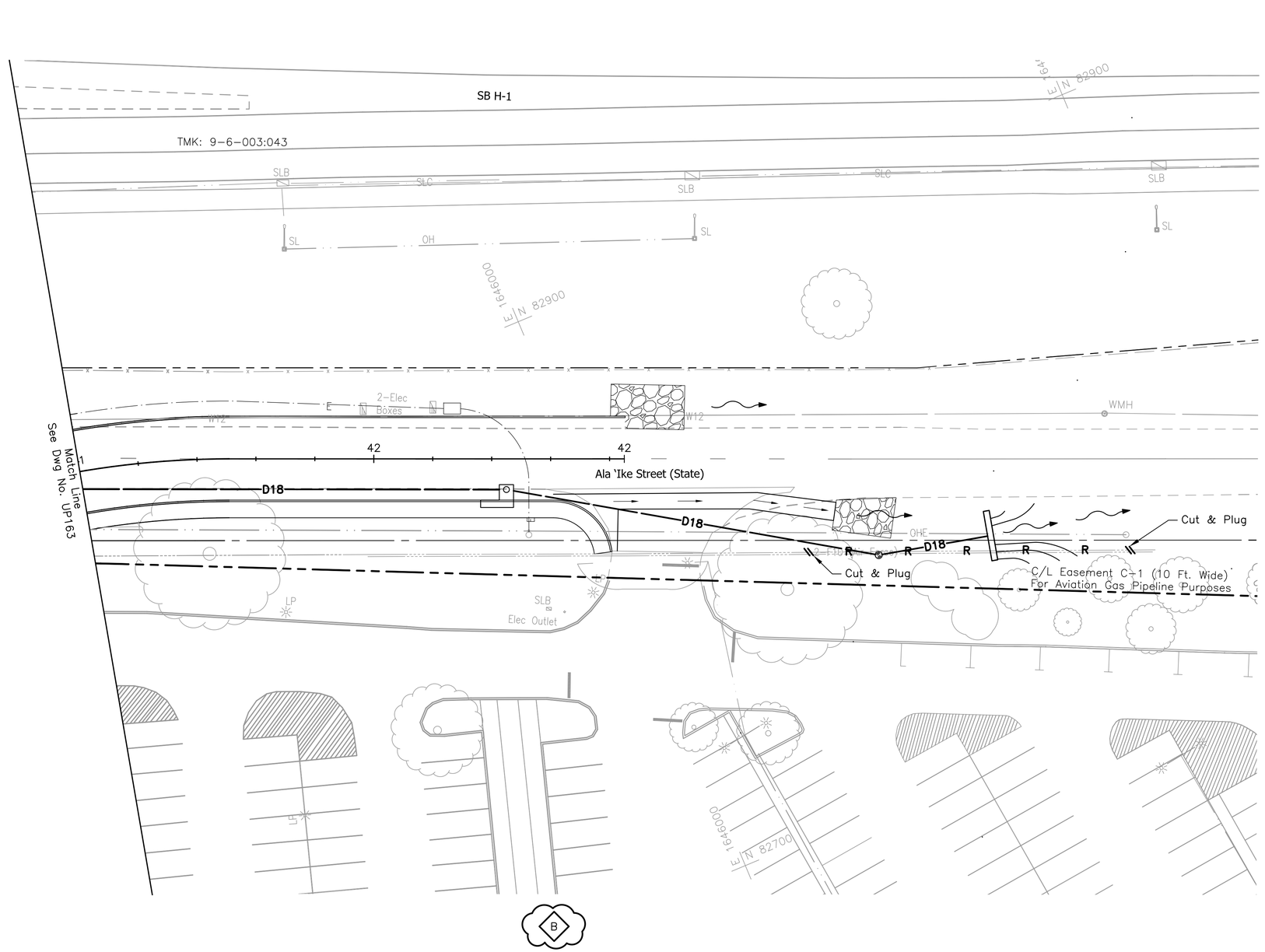
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

NORTH ACCESS RD STA 10+00 TO STA 15+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP169A
Drawing No.: UP169A Rev. B
Scale: 1"=20' H, 1"=5' V



NOTE:

For drainage relocations, see Drawing No. UP170A.

20' 0 20'

Rev	By	Date	Description
B	JY	05-22-09	Misc. Revisions
A	JY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Toba
Drawn: D Toba
Checked: H Andrews
Approved: J Yamamoto
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant: R. M. TOWILL CORPORATION
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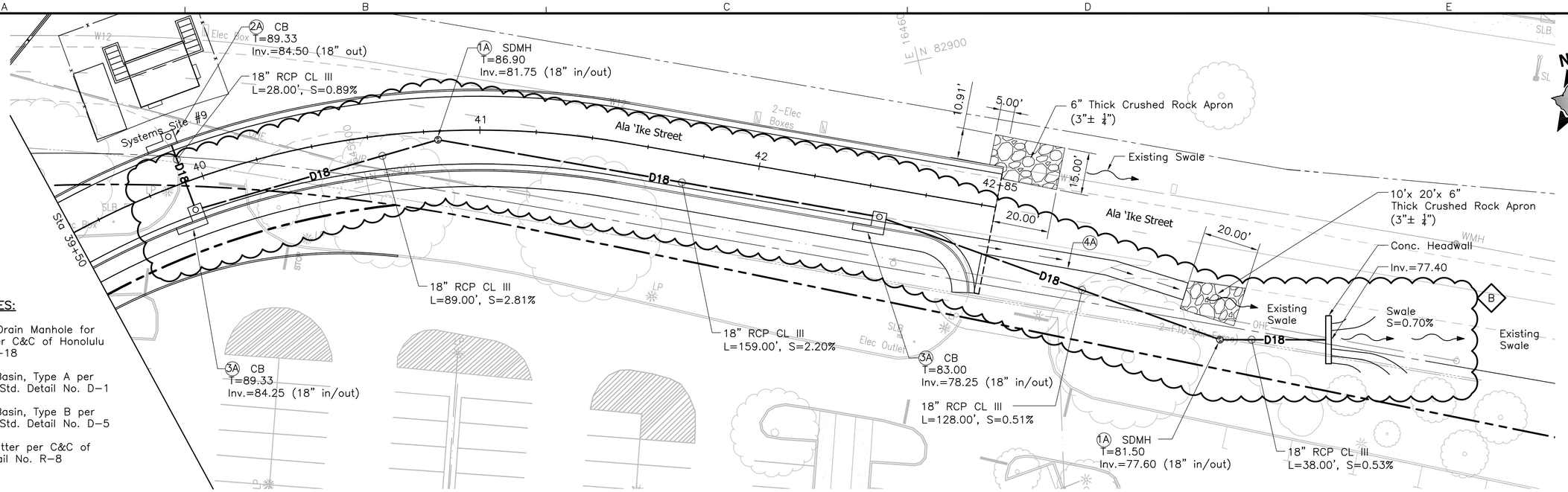
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

ALA `IKE ST STA 41+00 TO STA 42+85.00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP170
Drawing No.: UP170 Rev.: B
Scale: 1"=20'
Page No.: 142 of 314



CONSTRUCTION NOTES:

1A Construct Storm Drain Manhole for Pavement Area per C&C of Honolulu Std. Detail No. D-18

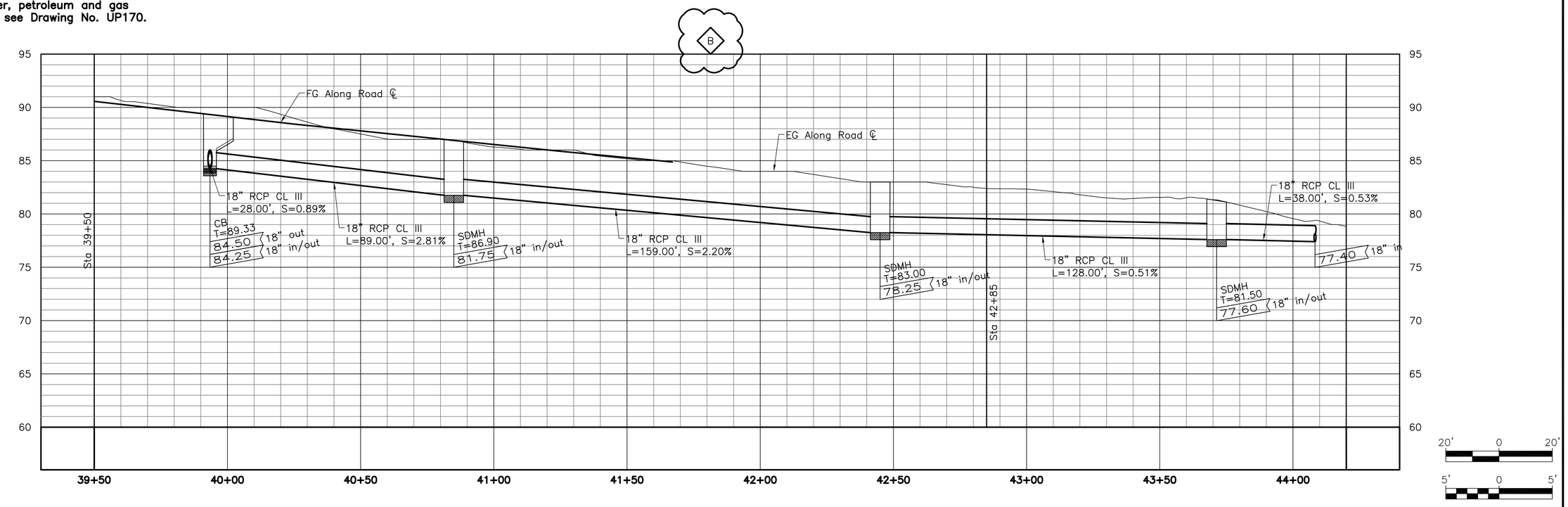
2A Construct Catch Basin, Type A per C&C of Honolulu Std. Detail No. D-1

3A Construct Catch Basin, Type B per C&C of Honolulu Std. Detail No. D-5

4A Construct Thru Gutter per C&C of Honolulu Std. Detail No. R-8

NOTE:

For water, sewer, petroleum and gas lines relocation see Drawing No. UP170.



20' 0 20'

5' 0 5'

Rev	By	Date	Description
B	MY	05-22-09	Added Profile & Revised Drain Line
A	MY	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: E Leung
Drawn: D Chua
Checked: N Orense
Approved: M Yonamine
Date: 04-03-09

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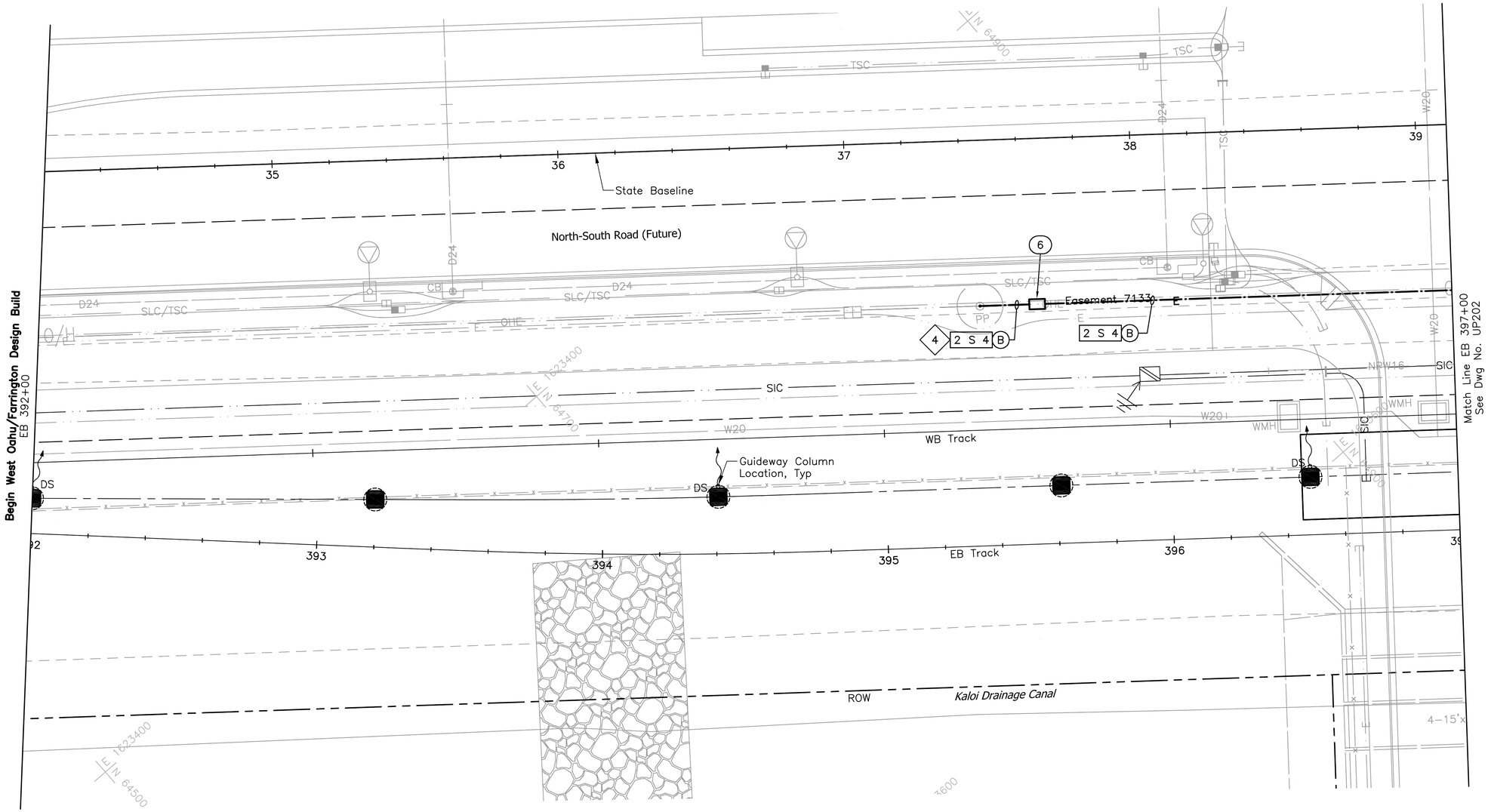
WEST O'AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
WATER, SEWER, DRAINAGE, PETROLEUM, & GAS

ALA 'IKE ST STA 39+50 TO STA 42+85 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP170A
Drawing No.: UP170A
Rev.: B
Scale: 1"=20' H, 1"=5' V
Page No.: 143 of 314



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 392+00 TO EB 397+00

Contract No.: DB–1200
CADD File: WF–D03–UP201
Drawing No: UP201 Rev. B
Scale: 1"=20'
Page No. 147 of 314

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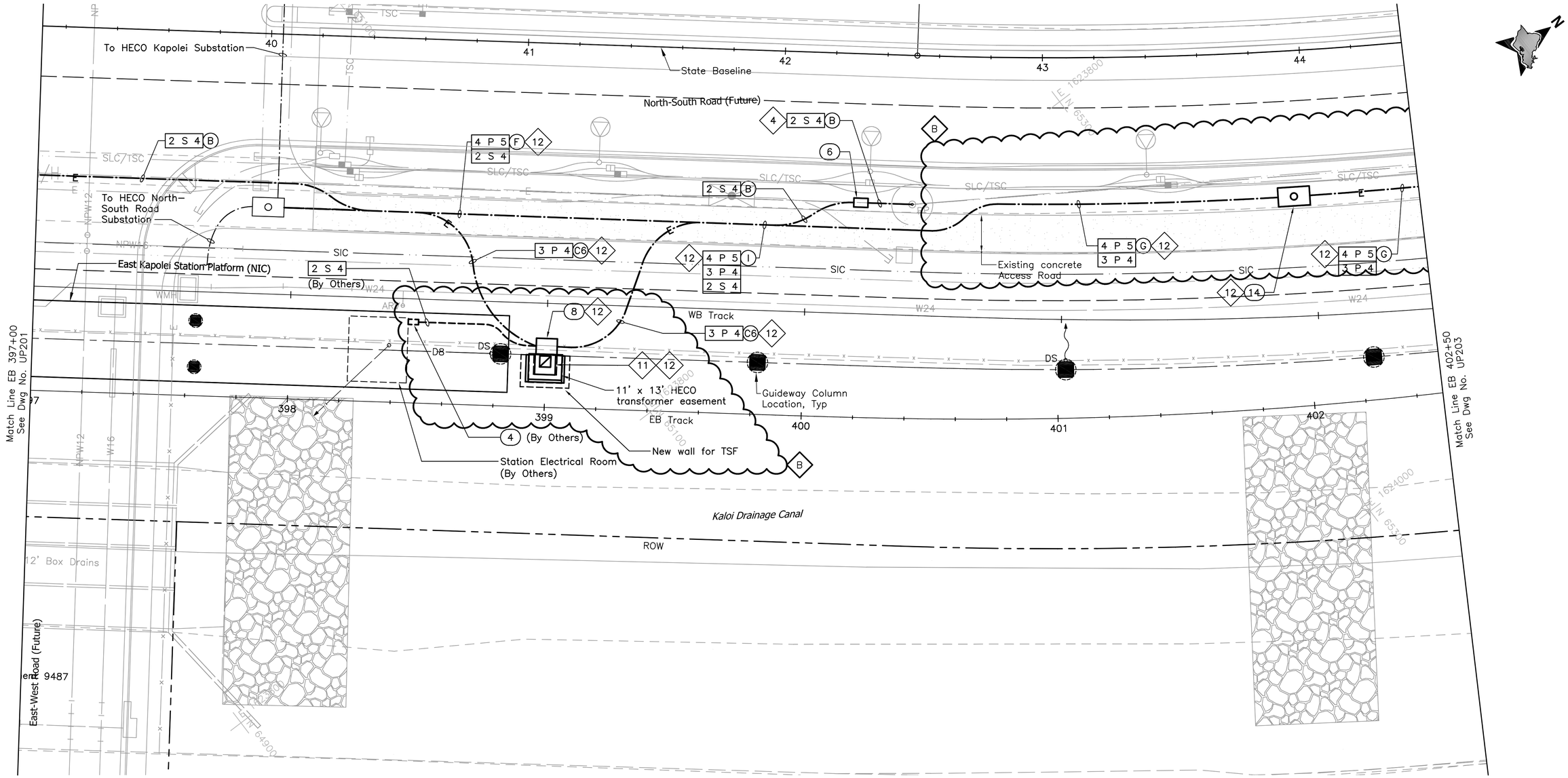

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

11 Provide transformer concrete pad. See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO transformer;
			Relocated HECO ductline.
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 397+00 TO EB 402+50

Contract No.: DB–1200
CADD File: WF–D03–UP202
Drawing No.: UP202 Rev.: B
Scale: 1"=20'

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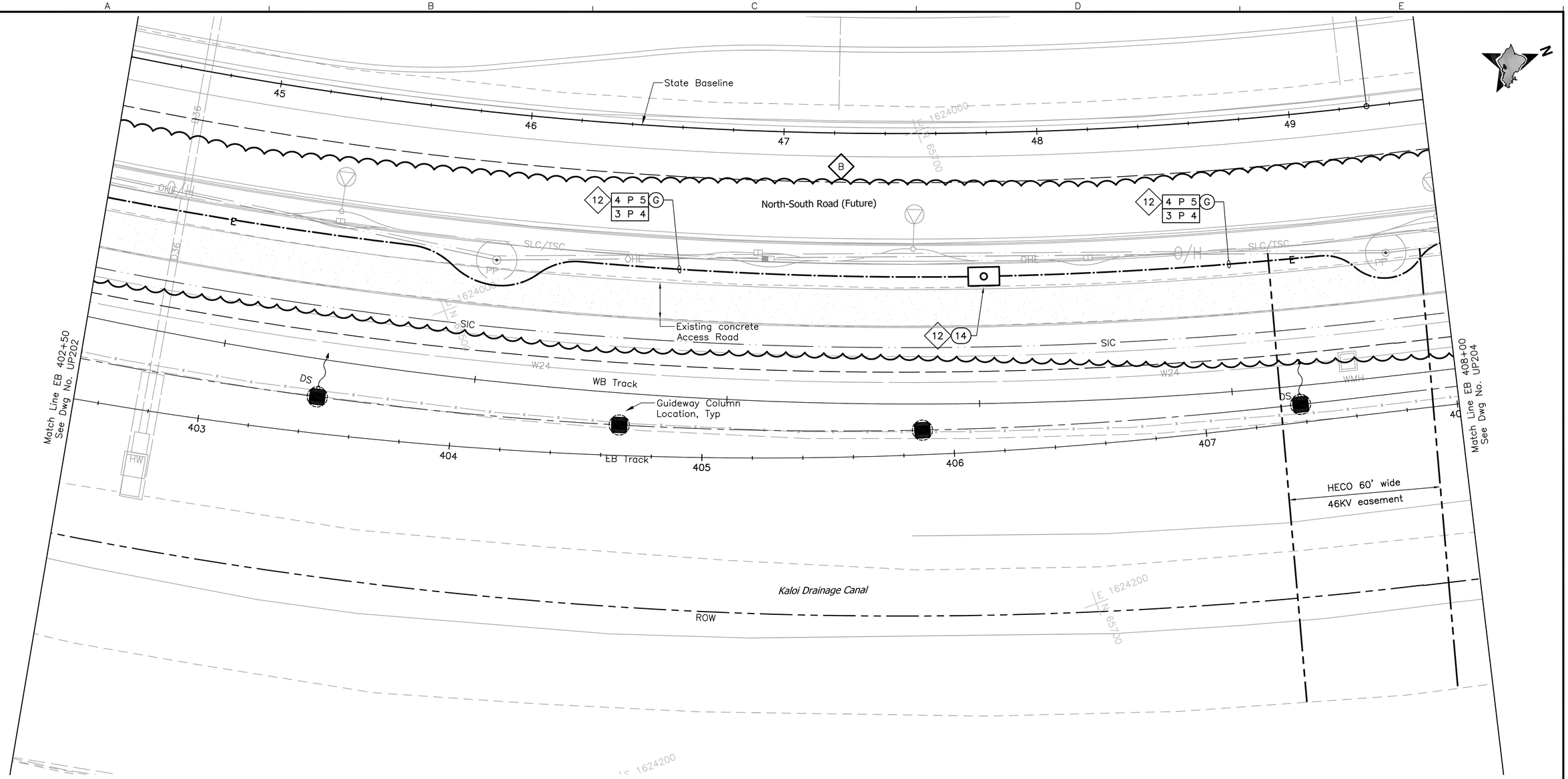

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 402+50 TO EB 408+00

Contract No.: DB–1200
CADD File: WF–D03–UP203
Drawing No: UP203 Rev. B
Scale: 1"=20'
Page No. 149 of 314

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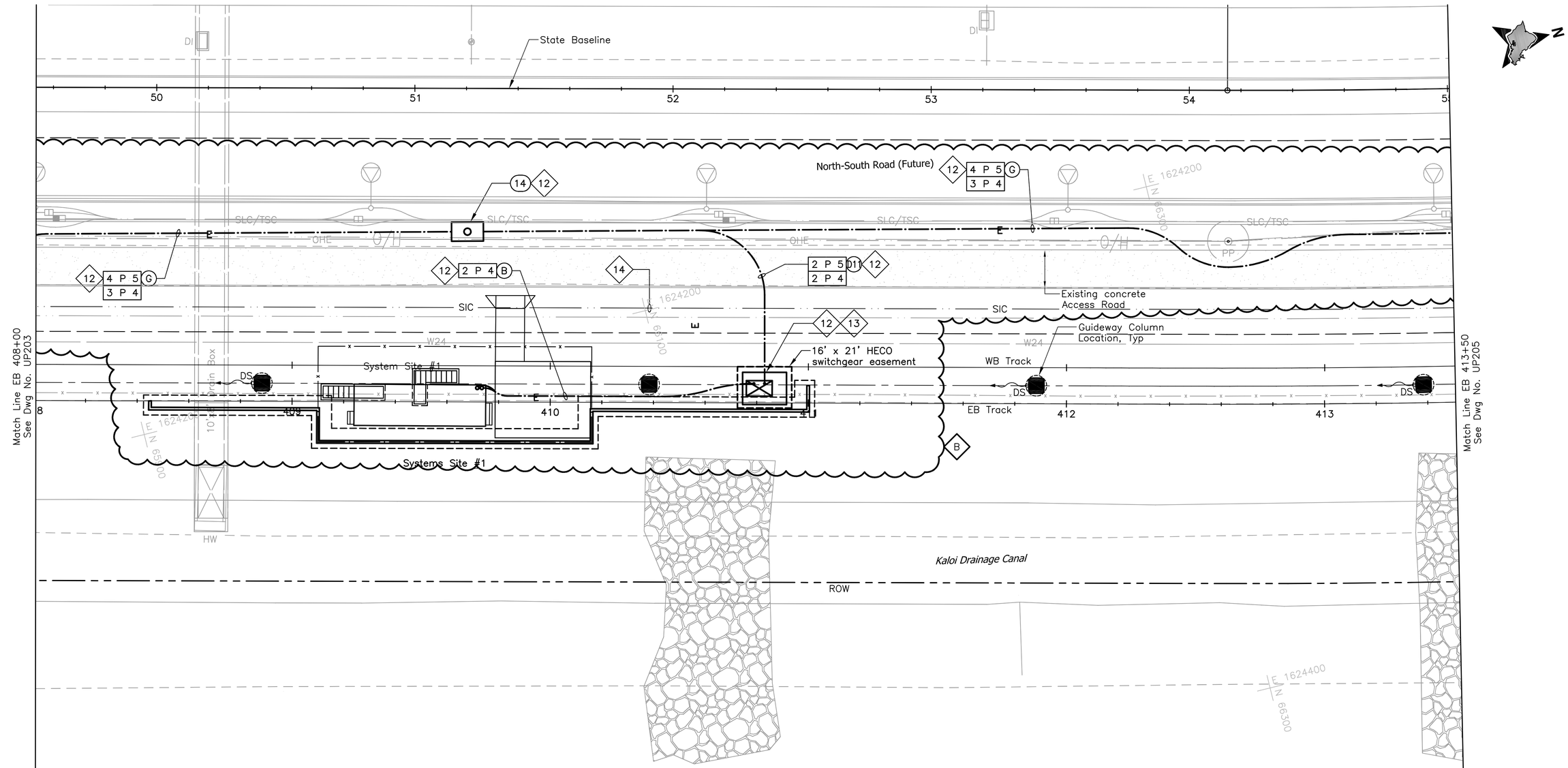

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

13 Provide switchgear concrete pad (switchgear by HECO). See detail 1/UP305.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO switchgear;
			Relocated HECO ductline.
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

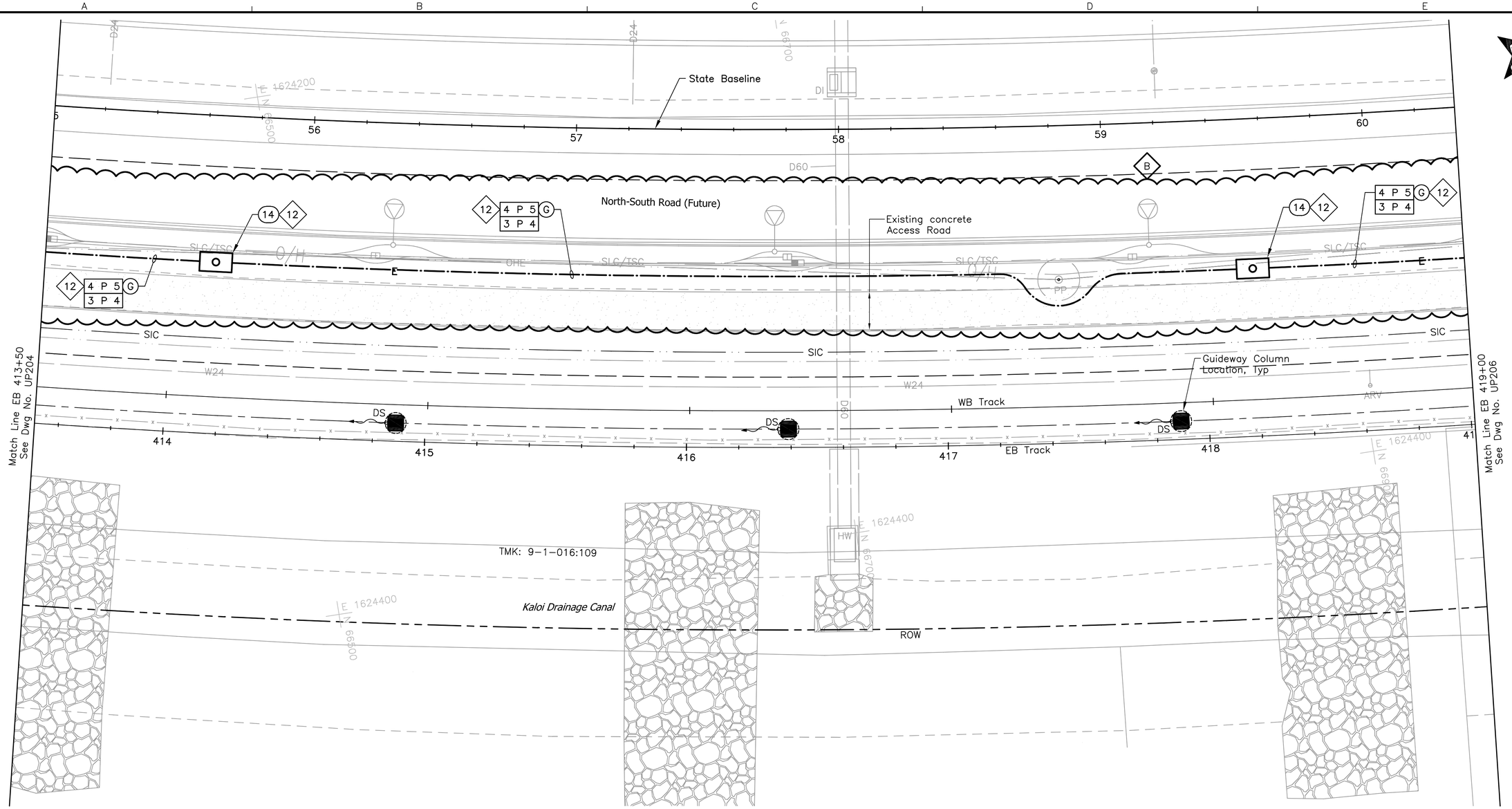
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 408+00 TO EB 413+50

Contract No.: DB–1200
CADD File: WF–D03–UP204
Drawing No.: UP204 Rev.: B
Scale: 1"=20'
Page No.: 150 of 314

I:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Dwg\WF-D03-UP201-UP234.dwg, WF-D03-UP204, 5/19/2009 2:58:57 PM, Fay, 11



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Relocated HECO ductline
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 413+50 TO EB 419+00

Contract No.: DB-1200
CADD File: WF-D03-UP205
Drawing No.: UP205 Rev.: B
Scale: 1"=20'
Page No. 151 of 314

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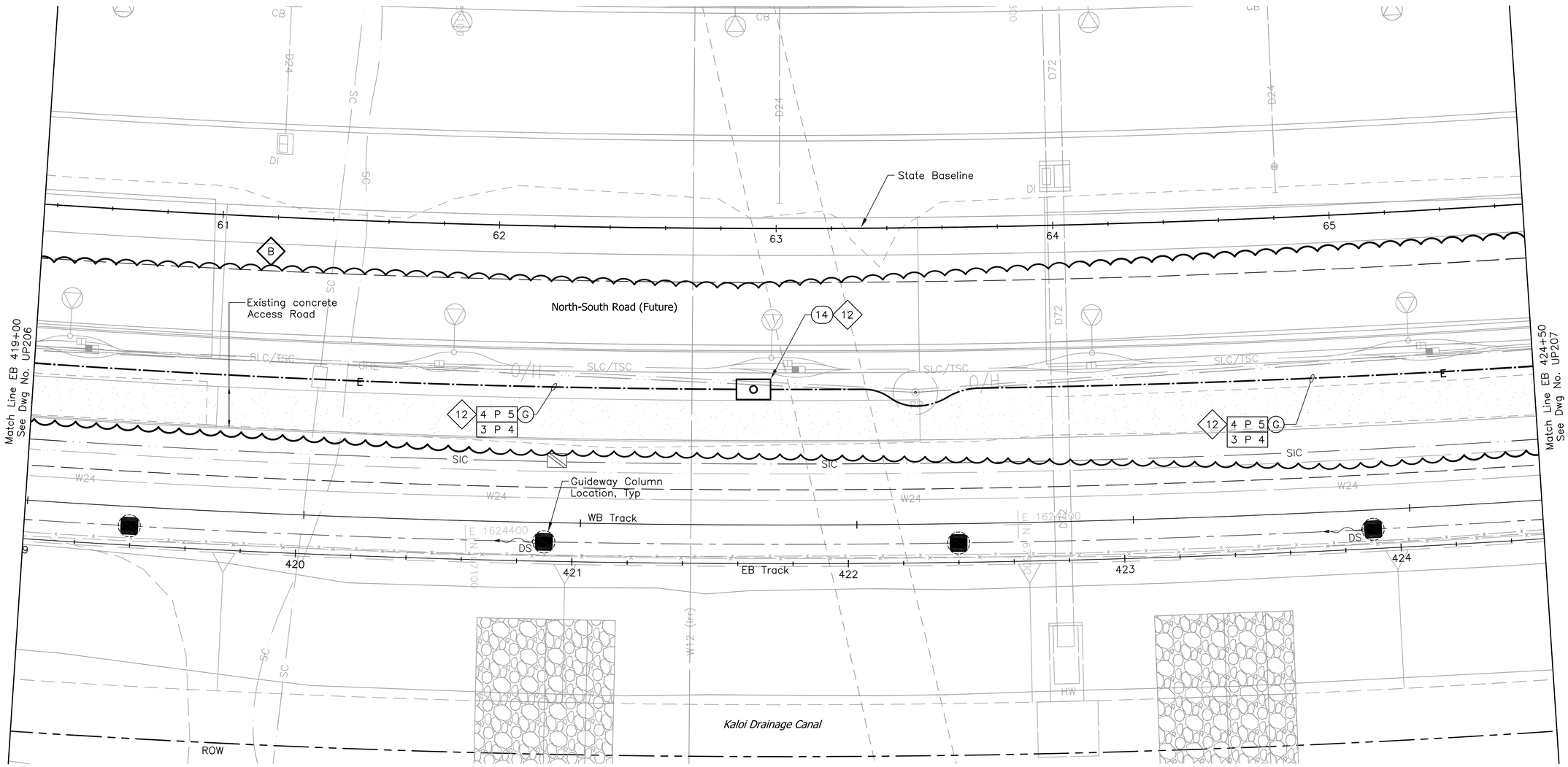

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 419+00 TO EB 424+50

Contract No.: DB–1200
CADD File: WF–D03–UP206
Drawing No.: UP206 Rev. B
Scale: 1"=20'
Page No. 152 of 314

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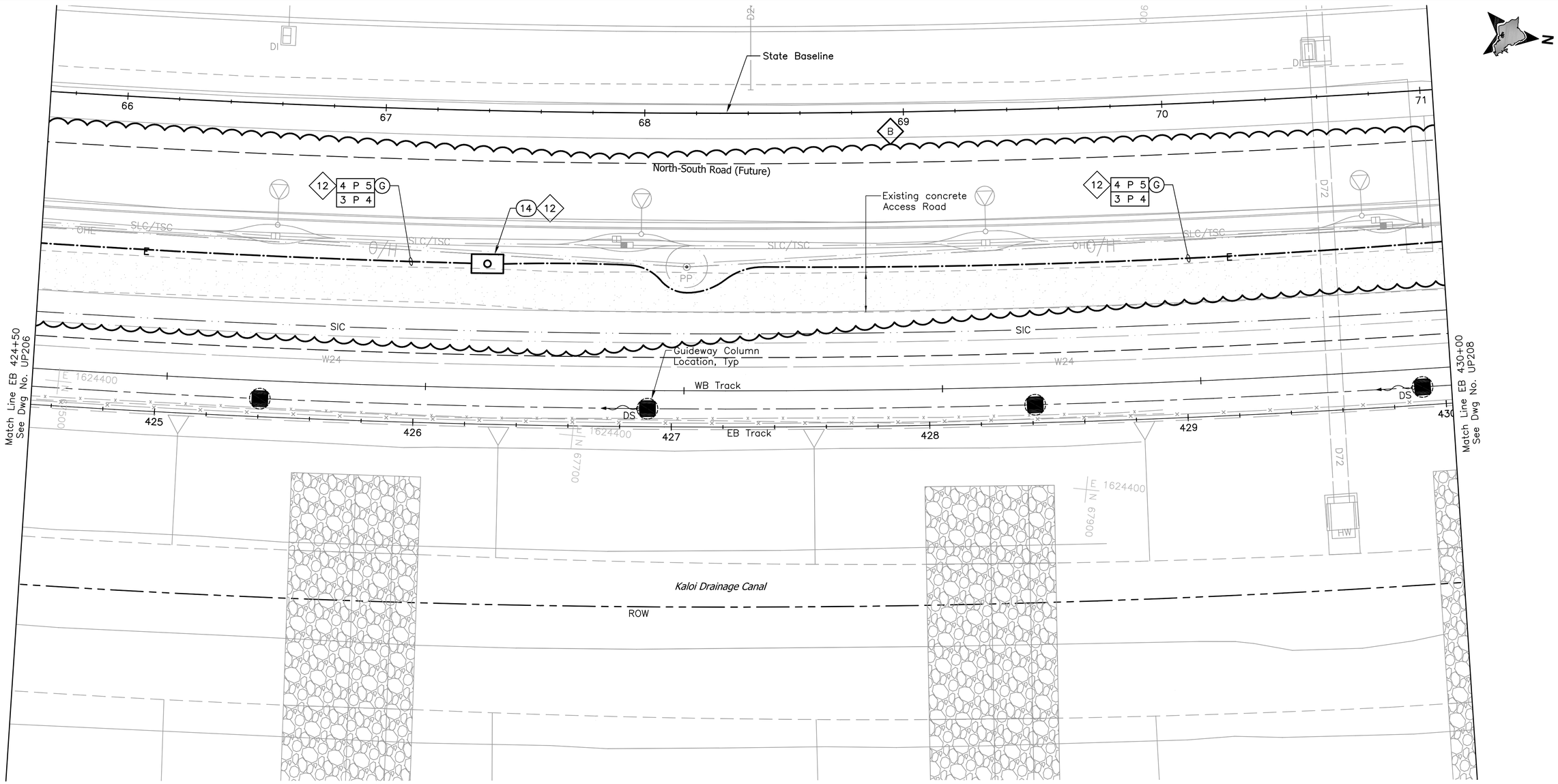

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NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 424+50 TO EB 430+00

Contract No.: DB–1200
CADD File: WF–D03–UP207
Drawing No.: UP207 Rev. B
Scale: 1"=20'
Page No. 153 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-E_C\reg\WF-D03-UP201-UP234.dwg, WF-D03-UP207, 5/19/2009 2:41:05 PM, Fay, 1:1

State Baseline

North-South Road (Future)

Match Line EB 430+00
See Dwg No. UP207

Match Line EB 435+50
See Dwg No. UP209

SLC/TSC

OHE

SIC

WMH

W24

W30

NP-W16

G6

CONCRETE–ENCASED 4" CONDUIT

Guideway Column
Location, Typ

WB Track

EB Track

DS

ROW

Existing concrete
Access Road

Kaloi Drainage Canal

72 73 74 75 76 431 432 433 434 435

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
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Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 430+00 TO EB 435+50

Contract No.: DB–1200
CADD File: WF–D03–UP208
Drawing No.: UP208 Rev. B
Scale: 1"=20'
Page No. 154 of 314

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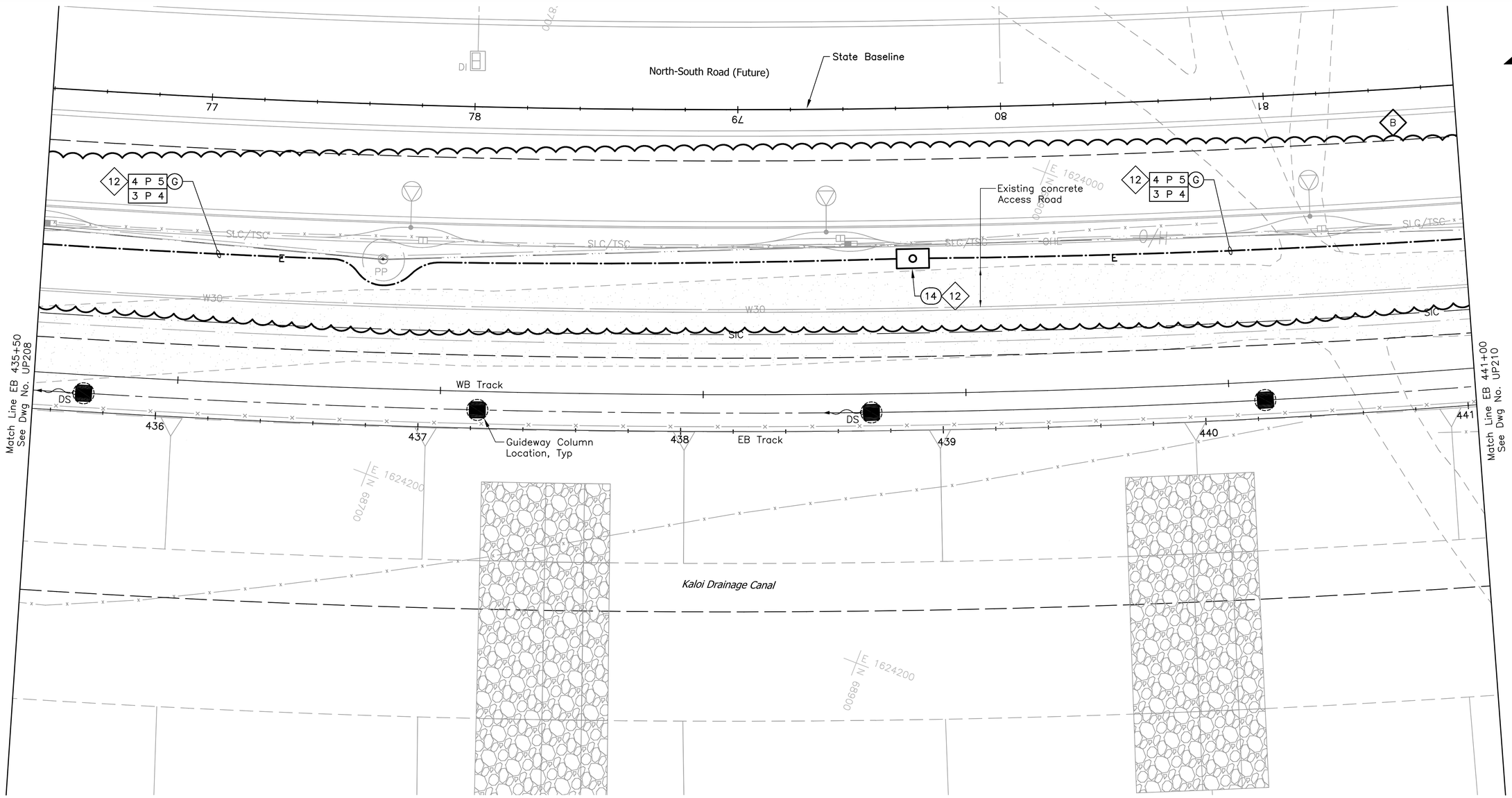

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NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

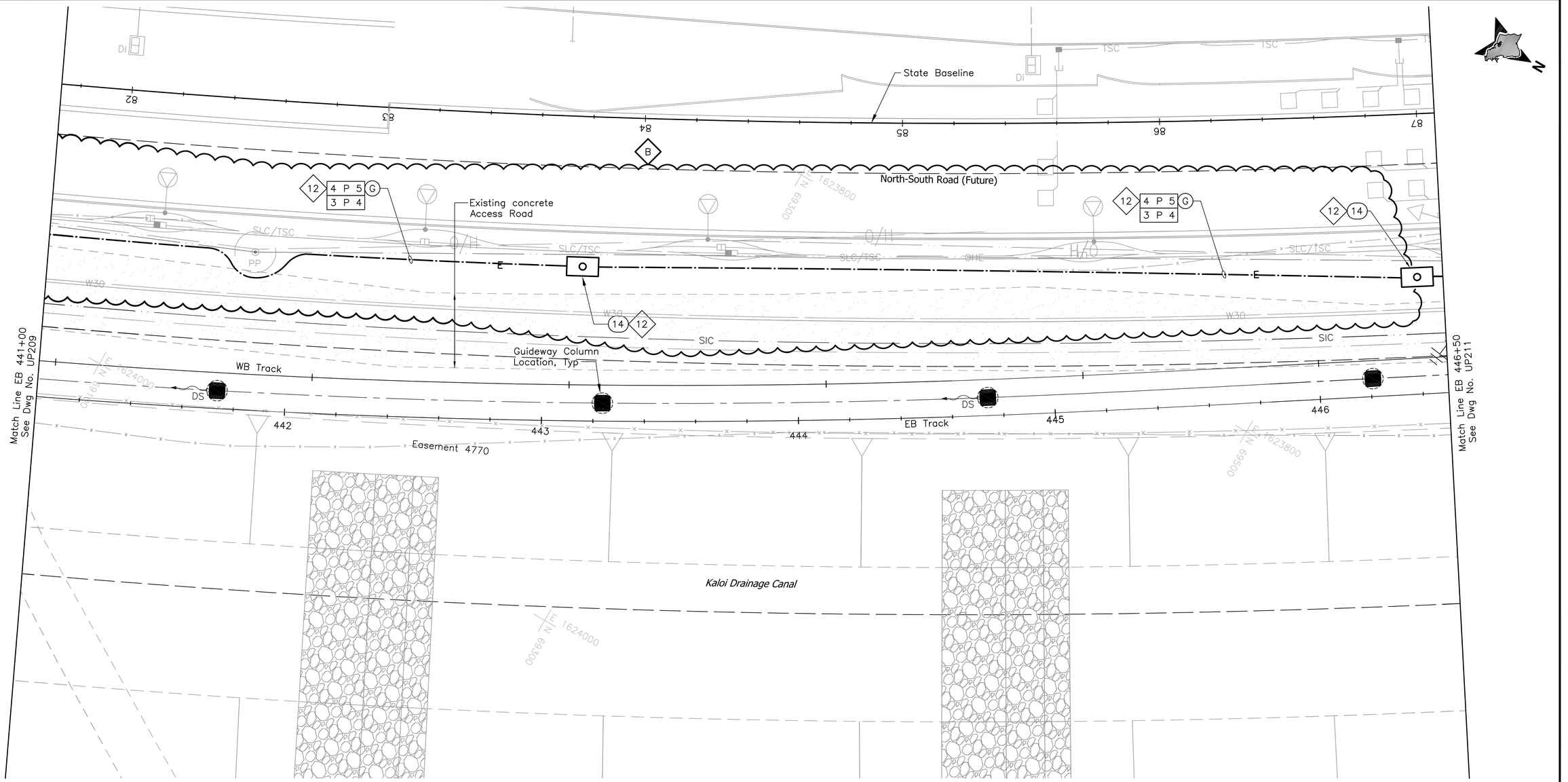
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 435+50 TO EB 441+00

Contract No.: DB–1200
CADD File: WF–D03–UP209
Drawing No: UP209 Rev. B
Scale: 1"=20'
Page No. 155 of 314

I:\01_PROJECTS\20070708\HHCTCSES-B_CDwg\WF-D03-UP201-UP234.dwg, WF-D03-UP209, 5/19/2009 2:44:17 PM, Fay, 1:1



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NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO ductline
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

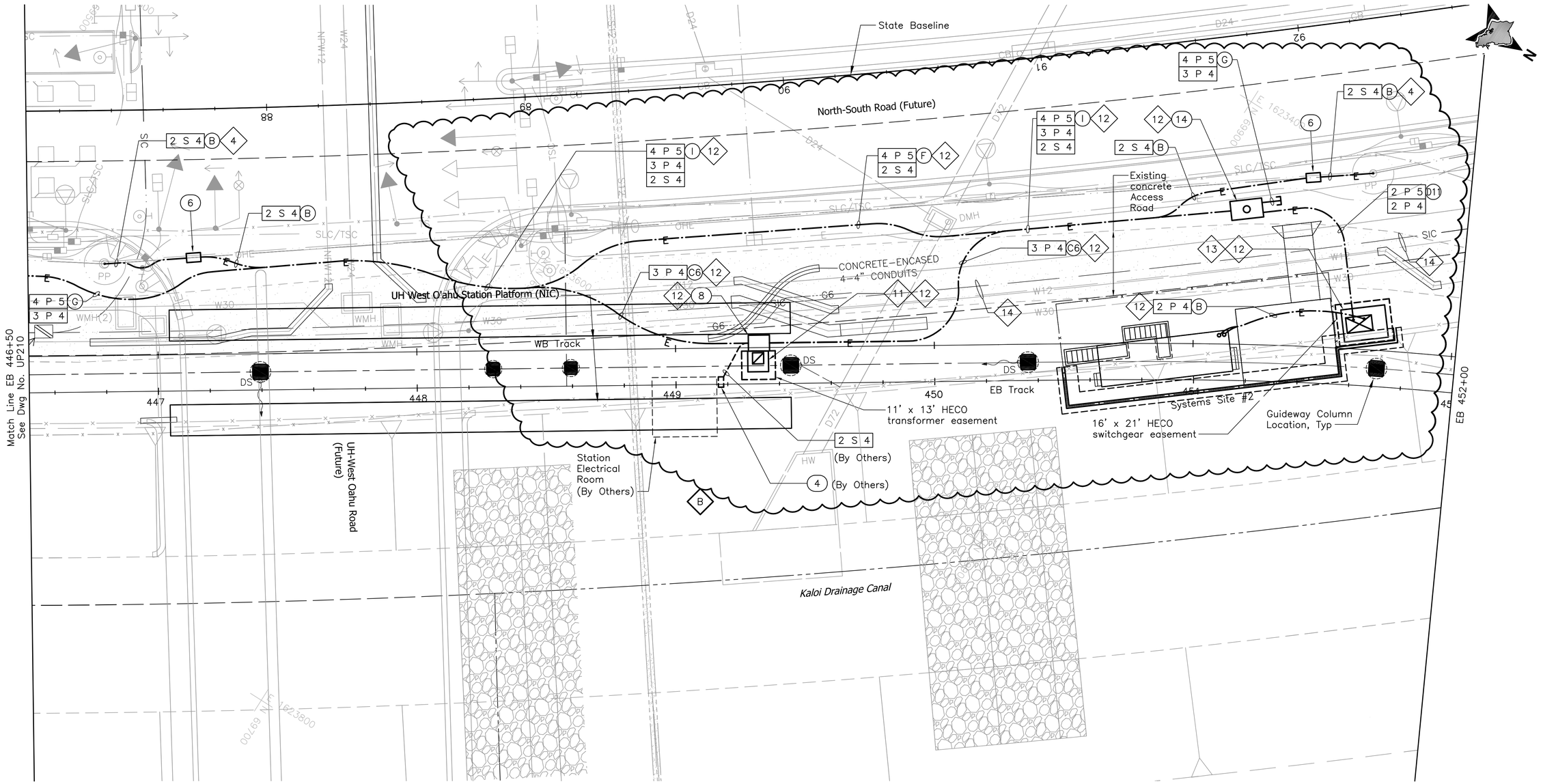
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 441+00 TO EB 446+50

Contract No.: DB–1200
CADD File: WF–D03–UP210
Drawing No.: UP210 Rev.: B
Scale: 1"=20'
Page No.: 156 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Cvlng\WF-D03-UP201-UP234.dwg, WF-D03-UP210, 5/19/2009 2:45:28 PM, Fay, 11



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

11 Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

13 Provide switchgear concrete pad (switchgear by HECO). See detail 1/UP305.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Relocated HECO transformer, switchgear, and ductline.
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

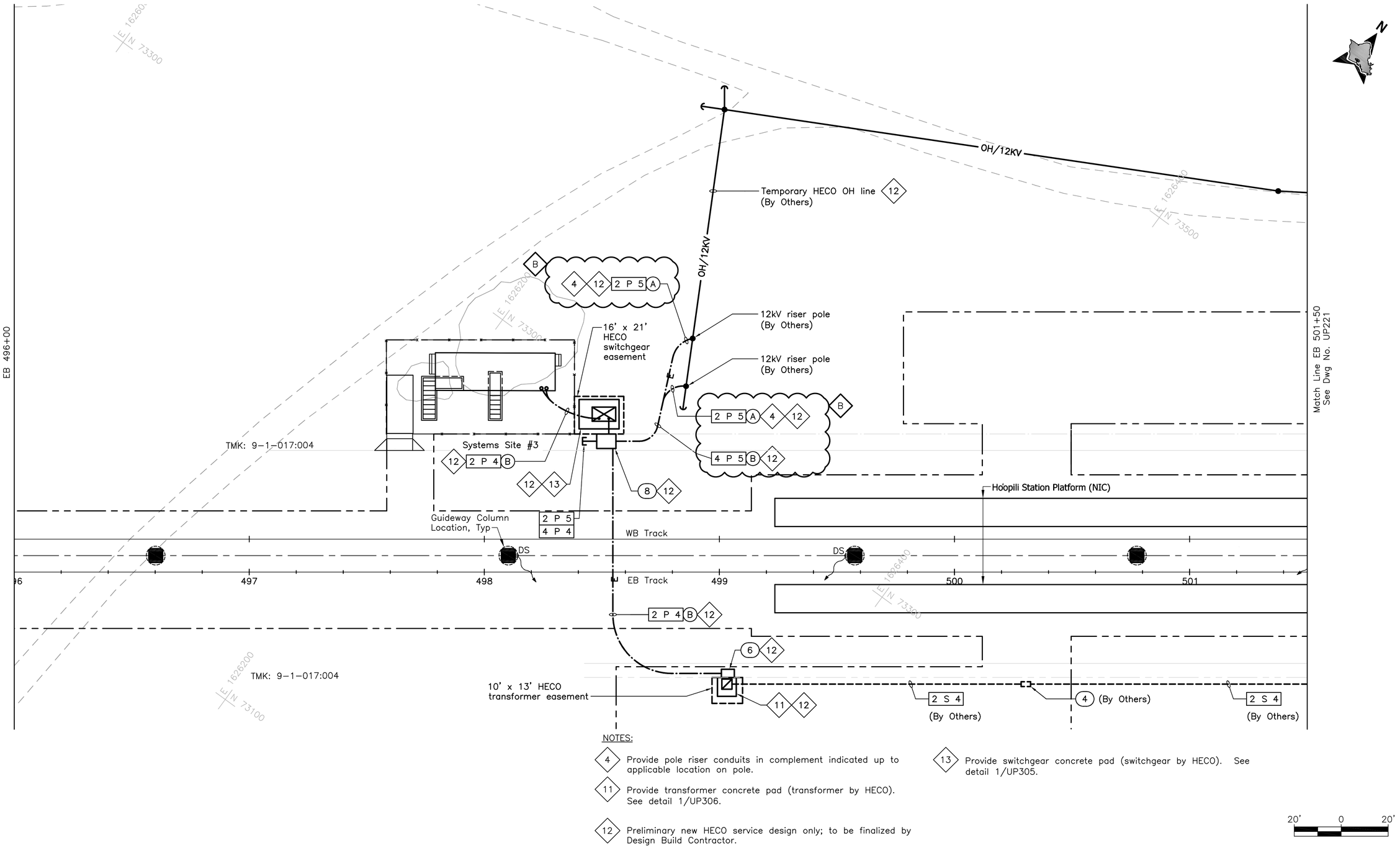
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 446+50 TO EB 452+00

Contract No.: DB–1200
CADD File: WF–D03–UP211
Drawing No: UP211 Rev. B
Scale: 1"=20'
Page No. 157 of 314

I:\01_PROJECTS\2007\07087-HHCTC\SE\Sub_C\dwg\WF-D03-UP211-UP234.dwg, WF-D03-UP211, 5/19/2009 2:26:54 PM, Fay, 1:1



NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

11 Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

13 Provide switchgear concrete pad (switchgear by HECO). See detail 1/UP305.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Increased number of ducts;
			Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 496+00 TO EB 501+50

Contract No.: DB-1200
CADD File: WF-D03-UP220
Drawing No: UP220 Rev. B
Scale: 1"=20'
Page No. 158 of 314

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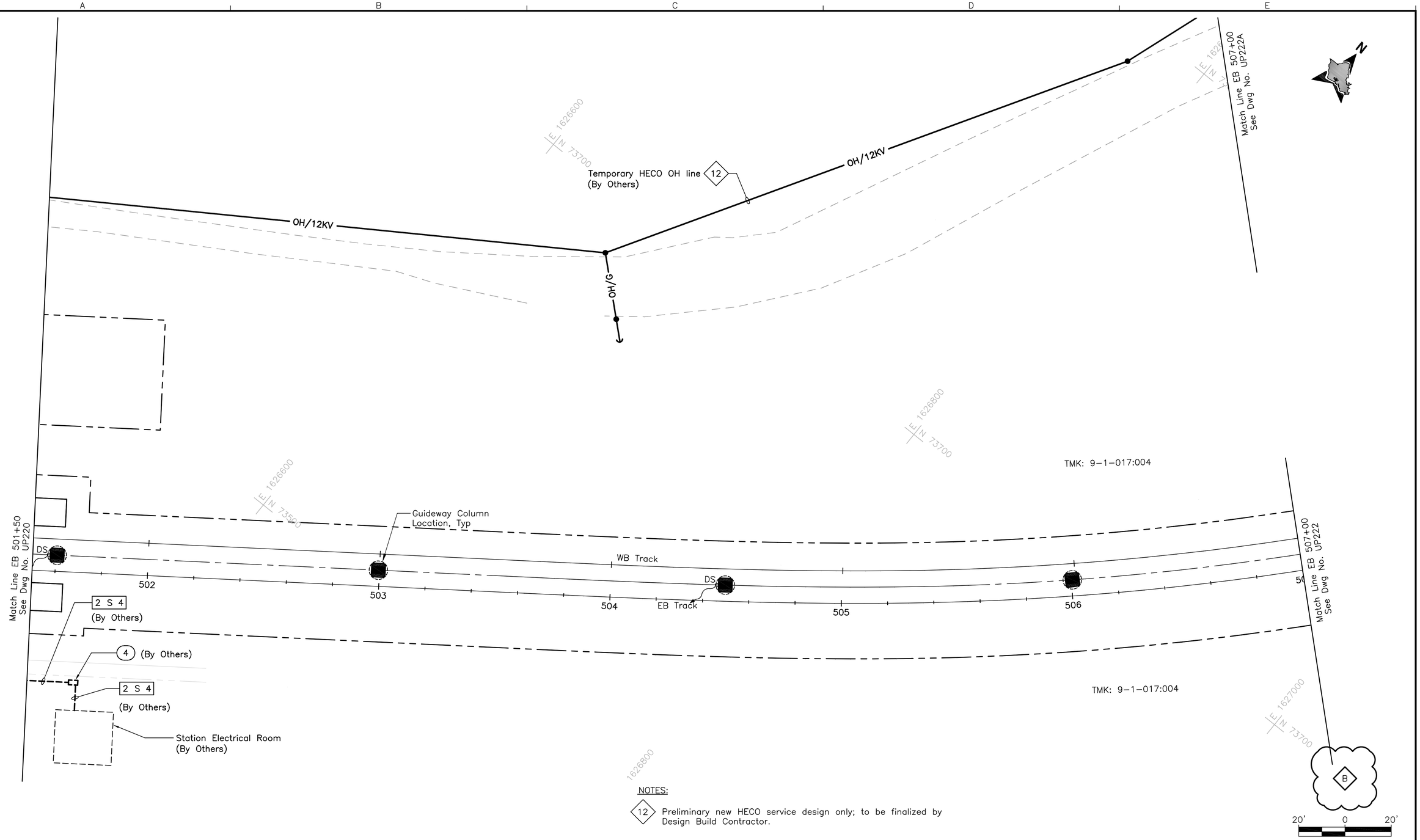

NOTES:

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 501+50 TO EB 507+00

Contract No.: DB-1200
CADD File: WF-D03-UP221
Drawing No.: UP221 Rev. B
Scale: 1"=20'
Page No. 159 of 314

P:\01_PROJECTS\2007\2078\4-HHCT\CSE\E4_Cvlwg\WF-D03-UP201-UP234.dwg, WF-D03-UP221, 5/19/2009 2:53:28 PM, Fay, 1:1

Match Line
See Dwg No. UP222A

2 P 5 B
See duct
profile 222-A

1627000 E
73900 N

TMK: 9-1-017:004

Guideway Column
Location, Typ

WB Track

EB Track

DS

508 509 510 511 512

EMH-222-1 (14)

4 2 P 5 B

P-3

Match Line EB 507+00
See Dwg No. UP221

EB 512+50

1627200 E
73900 N

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 507+00 TO EB 512+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP222
Drawing No.: UP222 Rev. B
Scale: 1"=20'
Page No. 160 of 314

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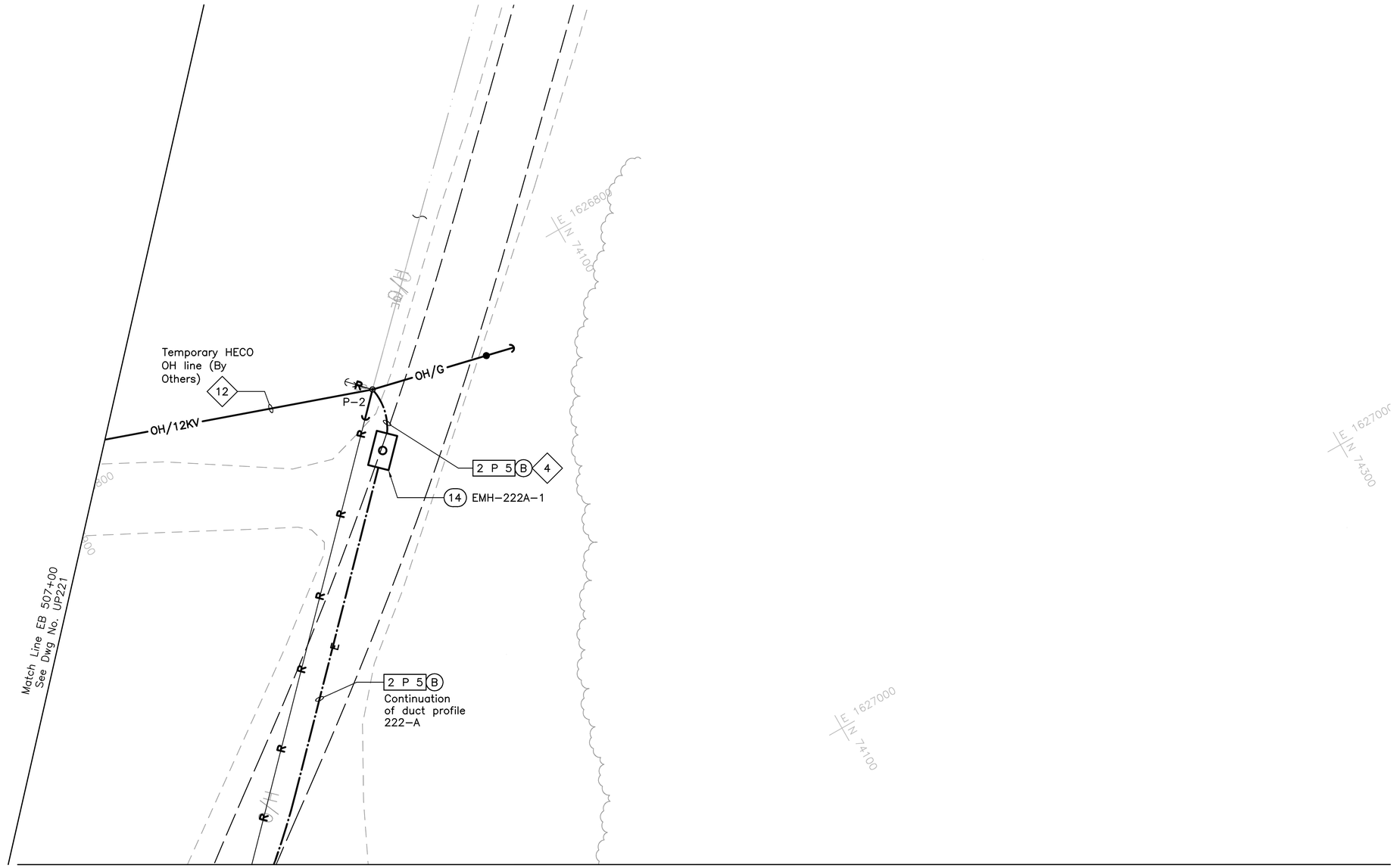

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 507+00 TO EB 512+50 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP222A
Drawing No: UP222A Rev. B
Scale: 1"=20'
Page No. 161 of 314

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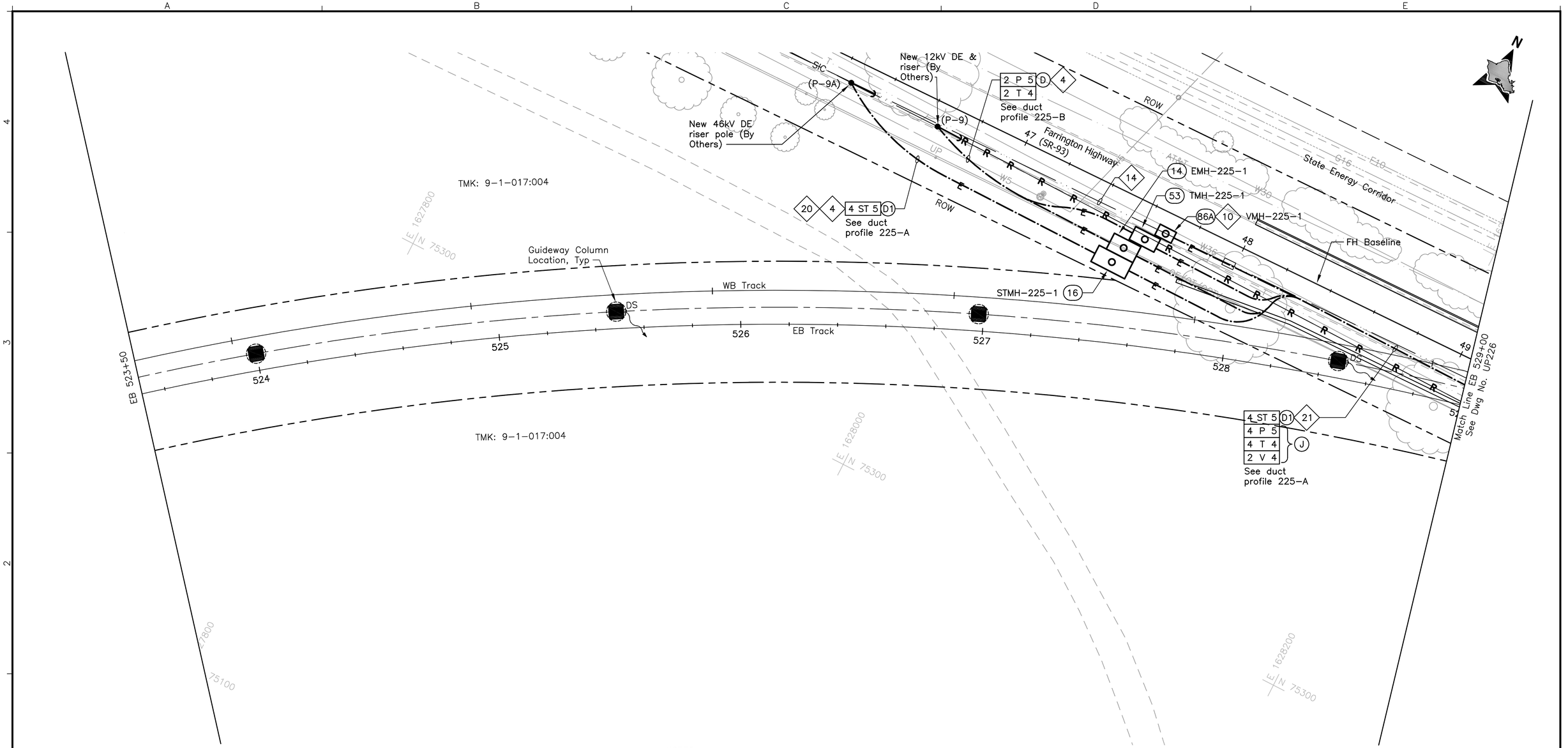

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

6 Intercept existing duct line with new manhole. Demolish Concrete jacket and duct within manhole and expose cables. Preserve cables during demolition of duct.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20 See detail 2/UP303.

21 See detail 3/UP303.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB #22 PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant: MKengineers
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 523+50 TO EB 529+00

Contract No.: DB-1200
CADD File: WF-D03-UP225
Drawing No.: UP225 Rev. B
Scale: 1"=20'
Page No. 163 of 314

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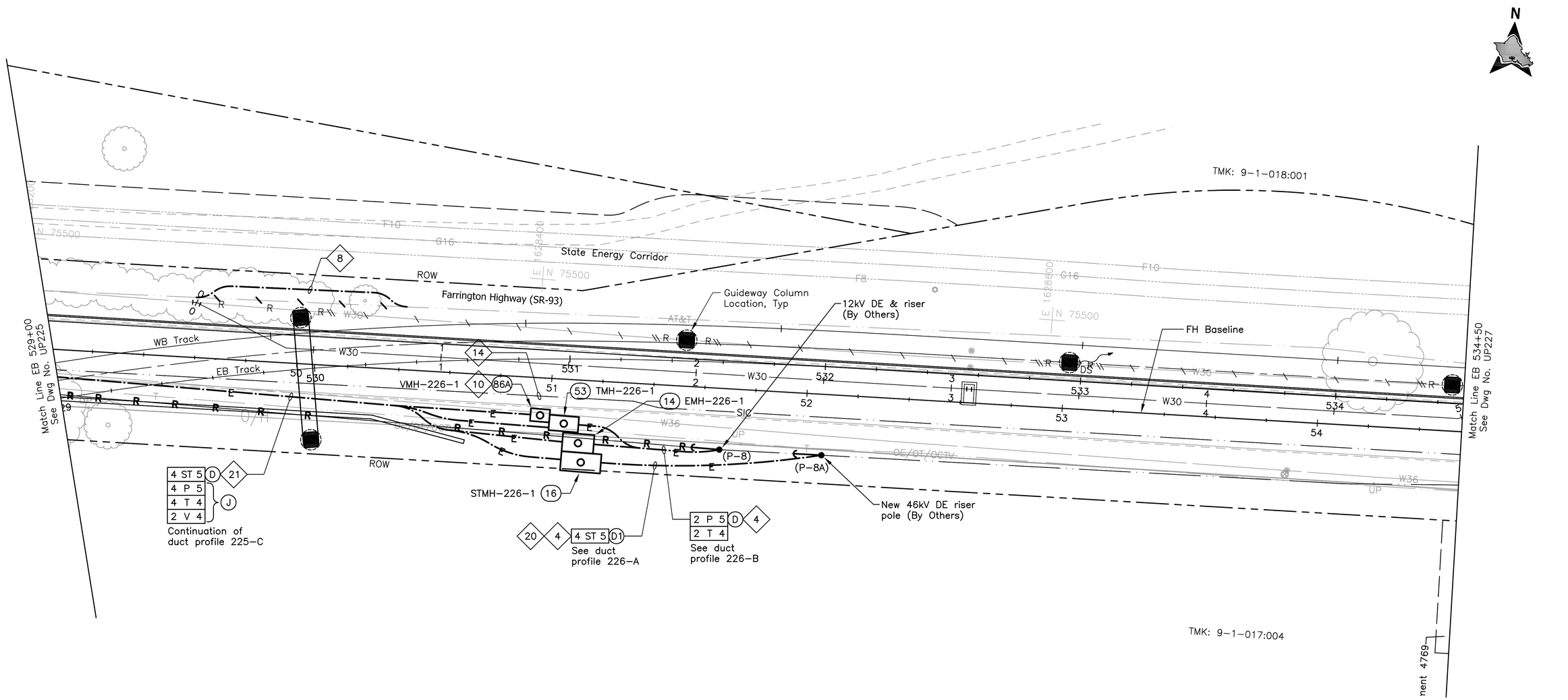

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

8 Re-route conduits and cables around guideway column.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20 See detail 2/UP303.

21 See detail 3/UP303.

B
20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 529+00 TO EB 534+50

Contract No.: DB-1200
CADD File: WF-D03-UP226
Drawing No: UP226 Rev. B
Scale: 1"=20'
Page No. 164 of 314

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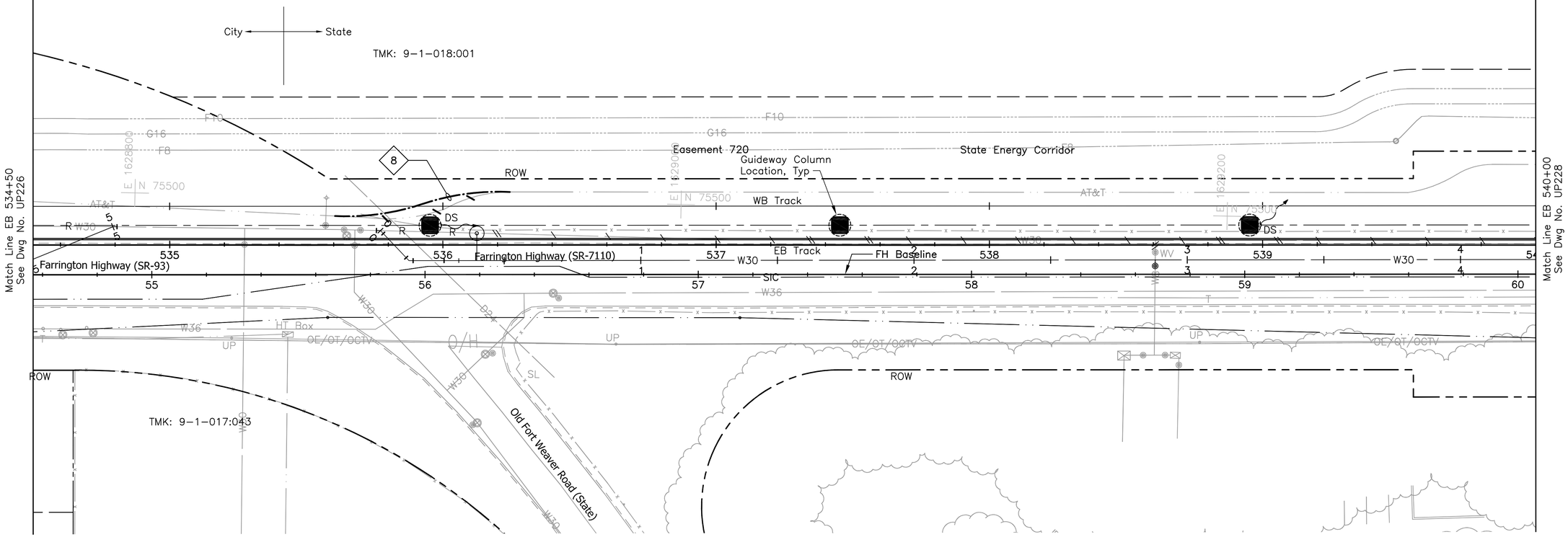

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

8 Re-route conduits and cables around guideway column.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 534+50 TO EB 540+00

Contract No.: DB-1200
CADD File: WF-D03-UP227
Drawing No: UP227 Rev. B
Scale: 1"=20'
Page No. 167 of 314

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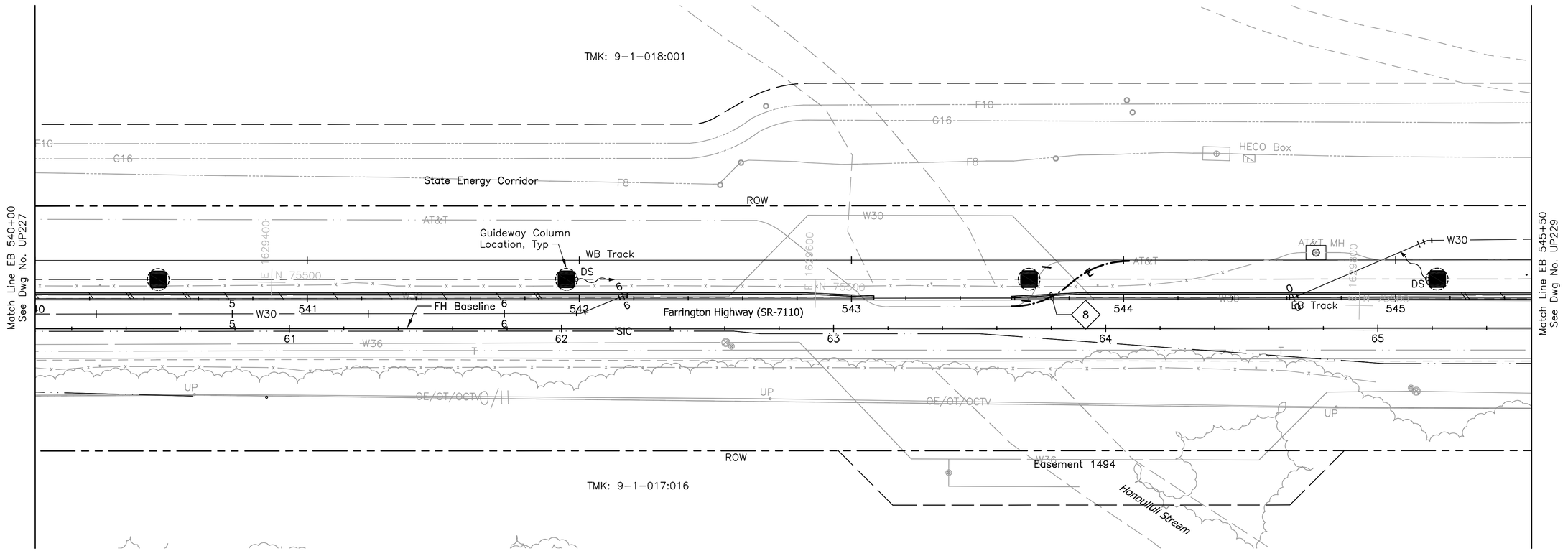

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

8 Re-route conduits and cables around guideway column.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 540+00 TO EB 545+50

Contract No.: DB-1200
CADD File: WF-D03-UP228
Drawing No: UP228 Rev. B
Scale: 1"=20'
Page No. 168 of 314

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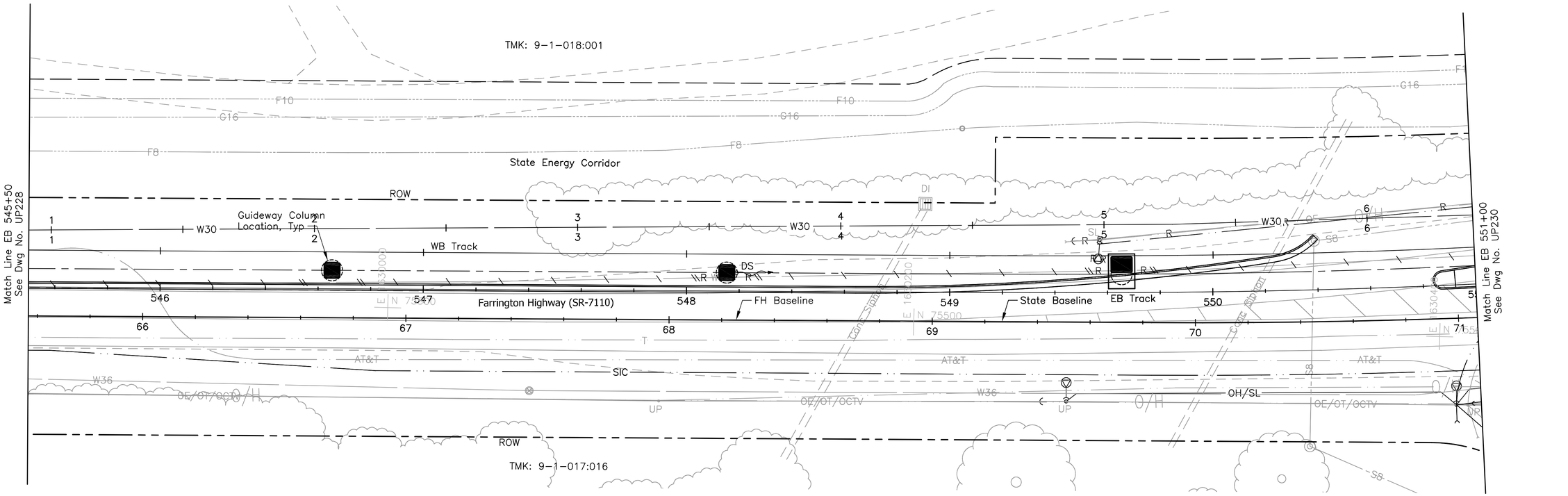

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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Phone: (808) 848-8622
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

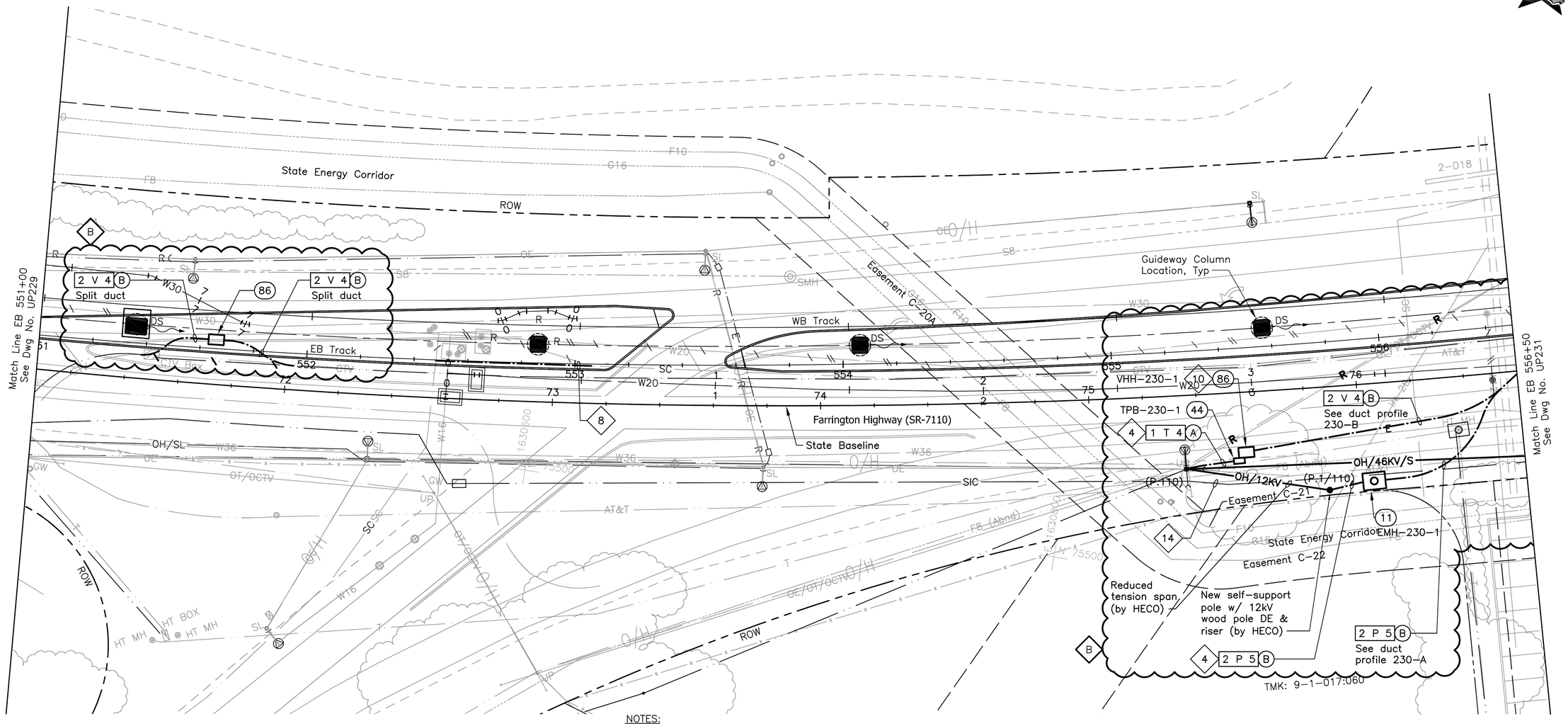
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 545+50 TO EB 551+00

Contract No.: DB-1200
CADD File: WF-D03-UP229
Drawing No: UP229 Rev. B
Scale: 1"=20'
Page No. 169 of 314

I:\PROJECTS\2007\07081-HHCTC\SEIS-B_Dwg\WF-D03-UP201-UP234.dwg, WF-D03-UP229, 6/19/2009 3:13:38 PM, Fay, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

8 Re-route conduits and cables around guideway column.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Revised ductline; updated drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 551+00 TO EB 556+50

Contract No.: DB-1200
CADD File: WF-D03-UP230
Drawing No: UP230 Rev. B
Scale: 1"=20'
Page No. 170 of 314

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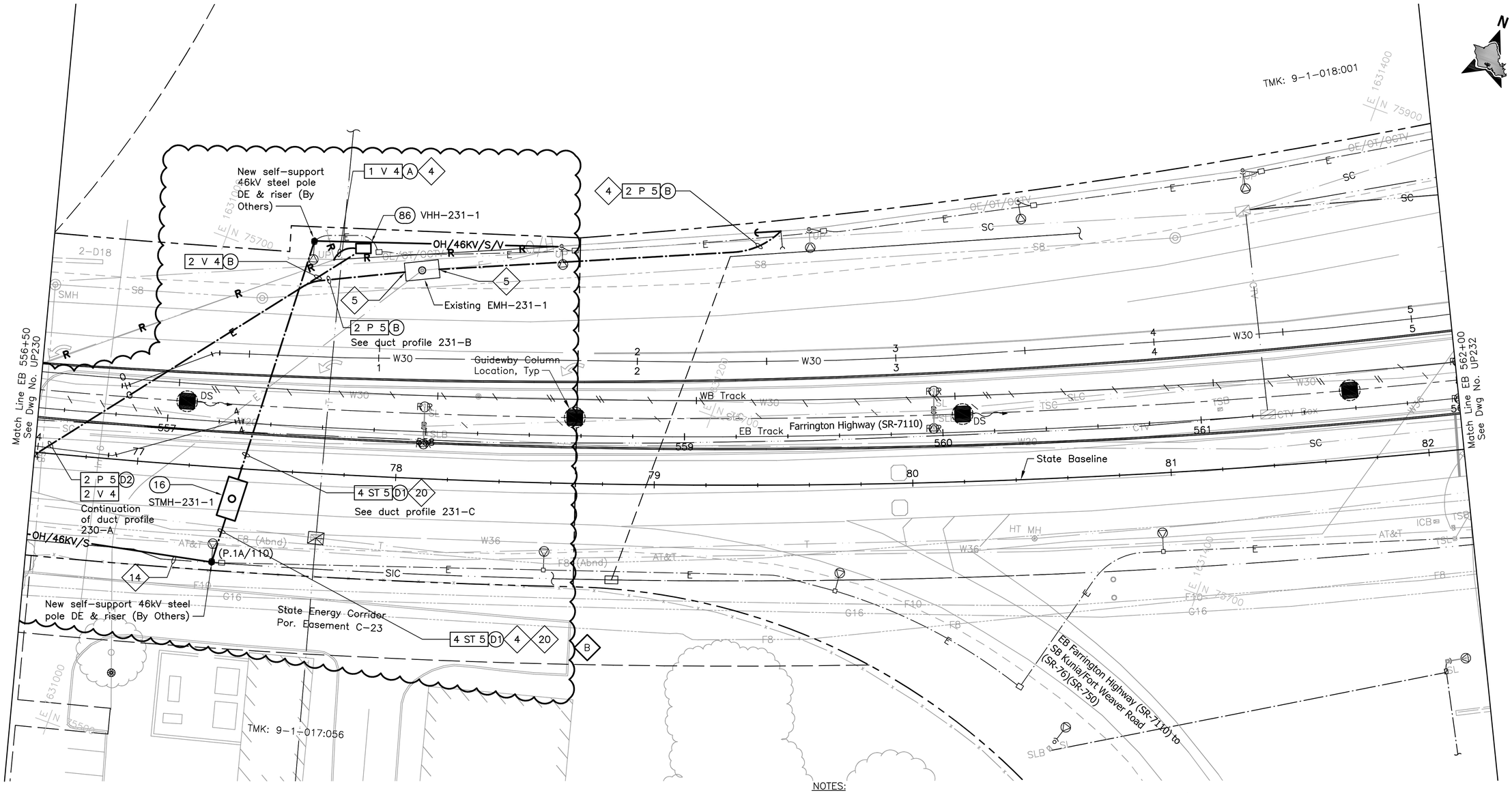

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20 See detail 2/UP303.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Added 46kV ductline; updated drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 556+50 TO EB 562+00

Contract No.: DB-1200
CADD File: WF-D03-UP231
Drawing No.: UP231 Rev.: B
Scale: 1"=20'
Page No.: 172 of 314

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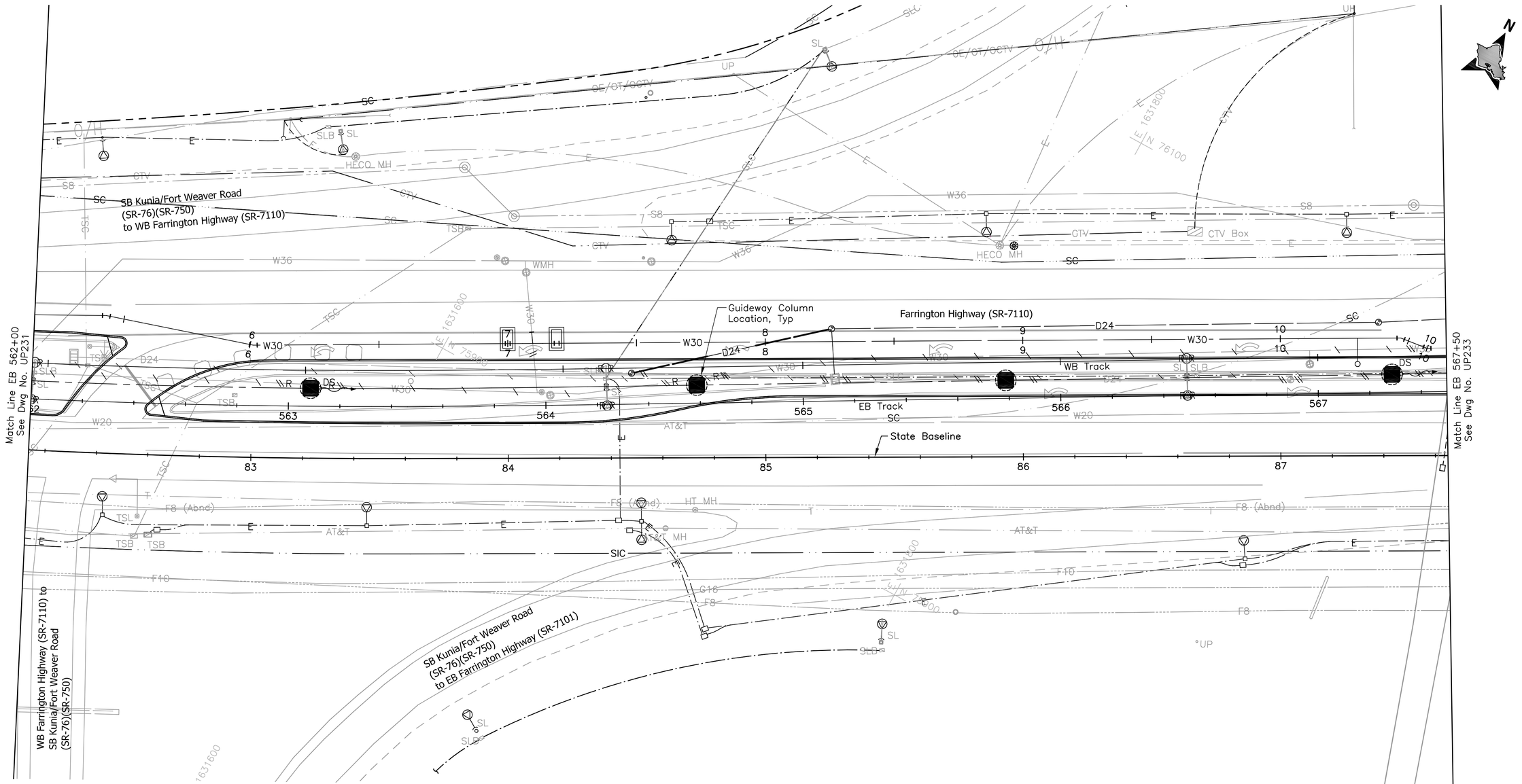

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 562+00 TO EB 567+50

Contract No.: DB–1200
CADD File: WF–D03–UP232
Drawing No: UP232 Rev. B
Scale: 1"=20'
Page No. 174 of 314

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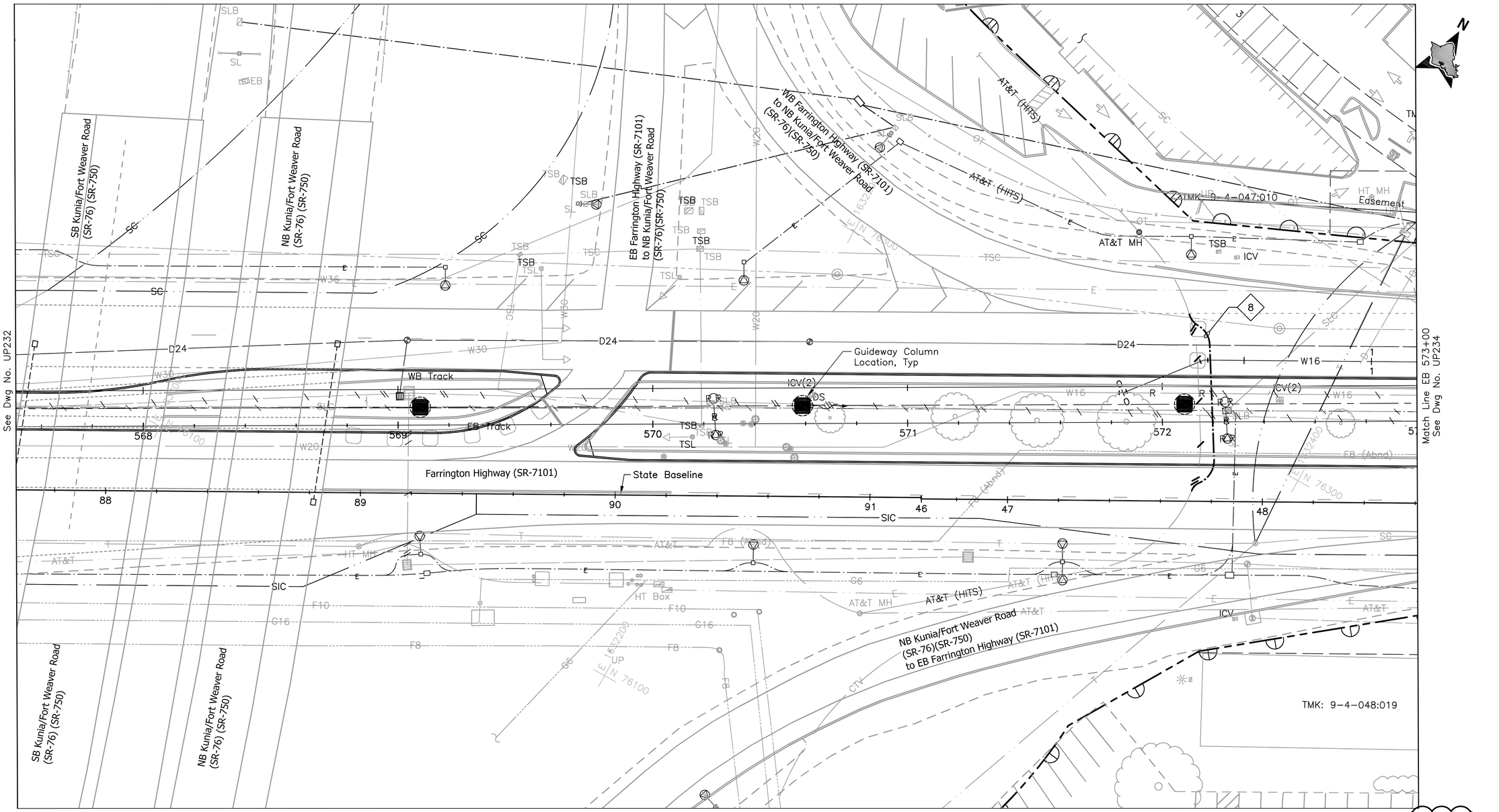

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

8 Re-route conduits and cables around guideway column.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 567+50 TO EB 573+00

Contract No.: DB-1200
CADD File: WF-D03-UP233
Drawing No: UP233 Rev. B
Scale: 1"=20'

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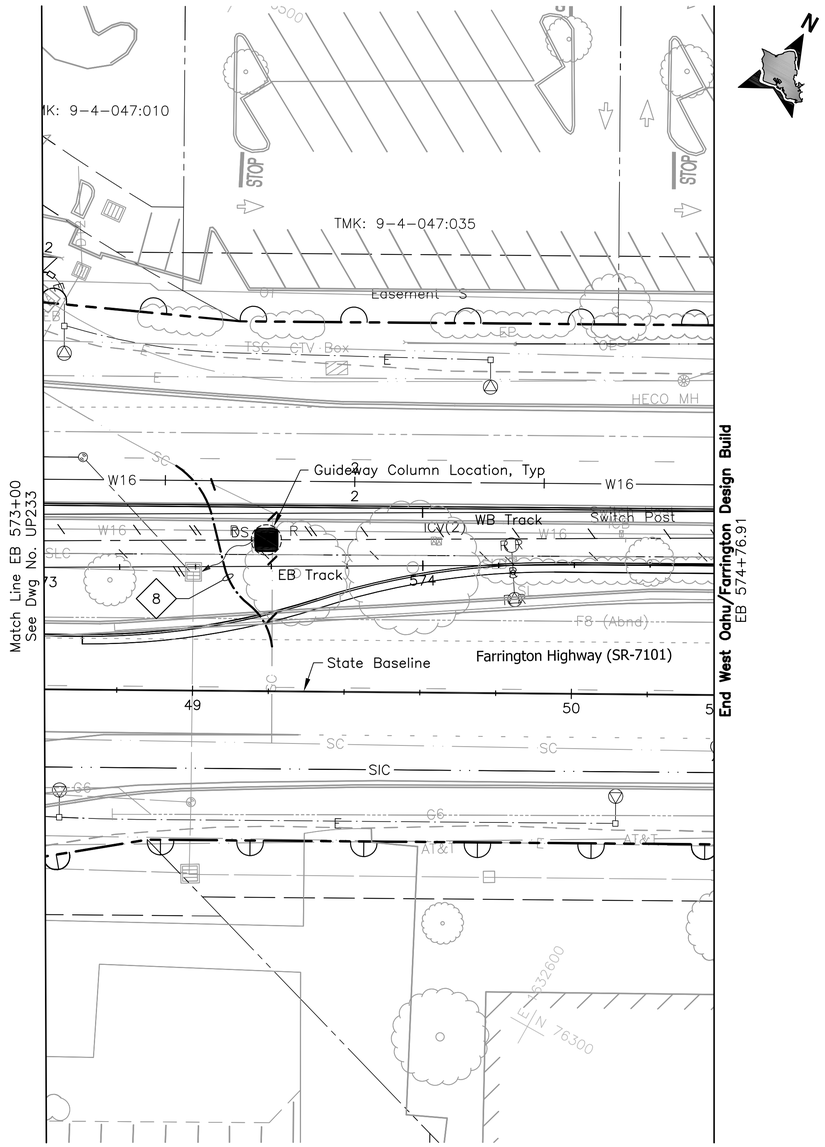

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

8 Re-route conduits and cables around guideway column.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: F Hirakami
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB 1822 PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 573+00 TO EB 574+76.91

Contract No.: DB-1200
CADD File: WF-D03-UP234
Drawing No: UP234 Rev. B
Scale: 1"=20'
Page No. 176 of 314

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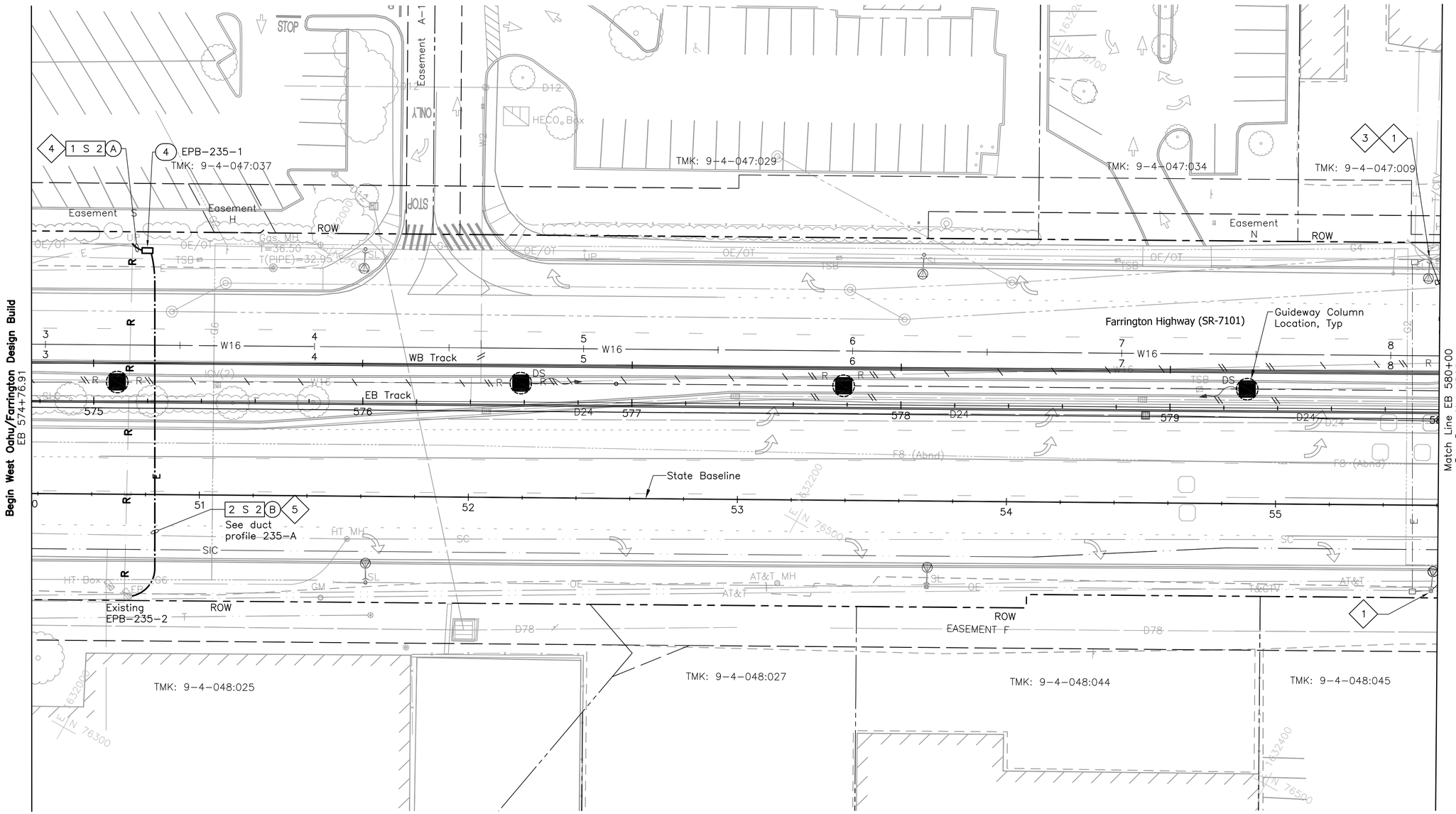

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

1. Install 2" riser up pole to secondary or street light level as applicable and terminate in weatherhead. Install conductors and provide slack for HECO to connect, or make connection if conductors are on pole dedicated to street lighting system. disconnect and remove overhead conductors indicated.
2. Provide 3#2, #8 ground in conduit, pullboxes, risers and make connections to replace overhead conductors.
3. Convert pole to self-sustaining metal pole (by HECO).
4. Provide pole riser conduits in complement indicated up to applicable location on pole.
5. Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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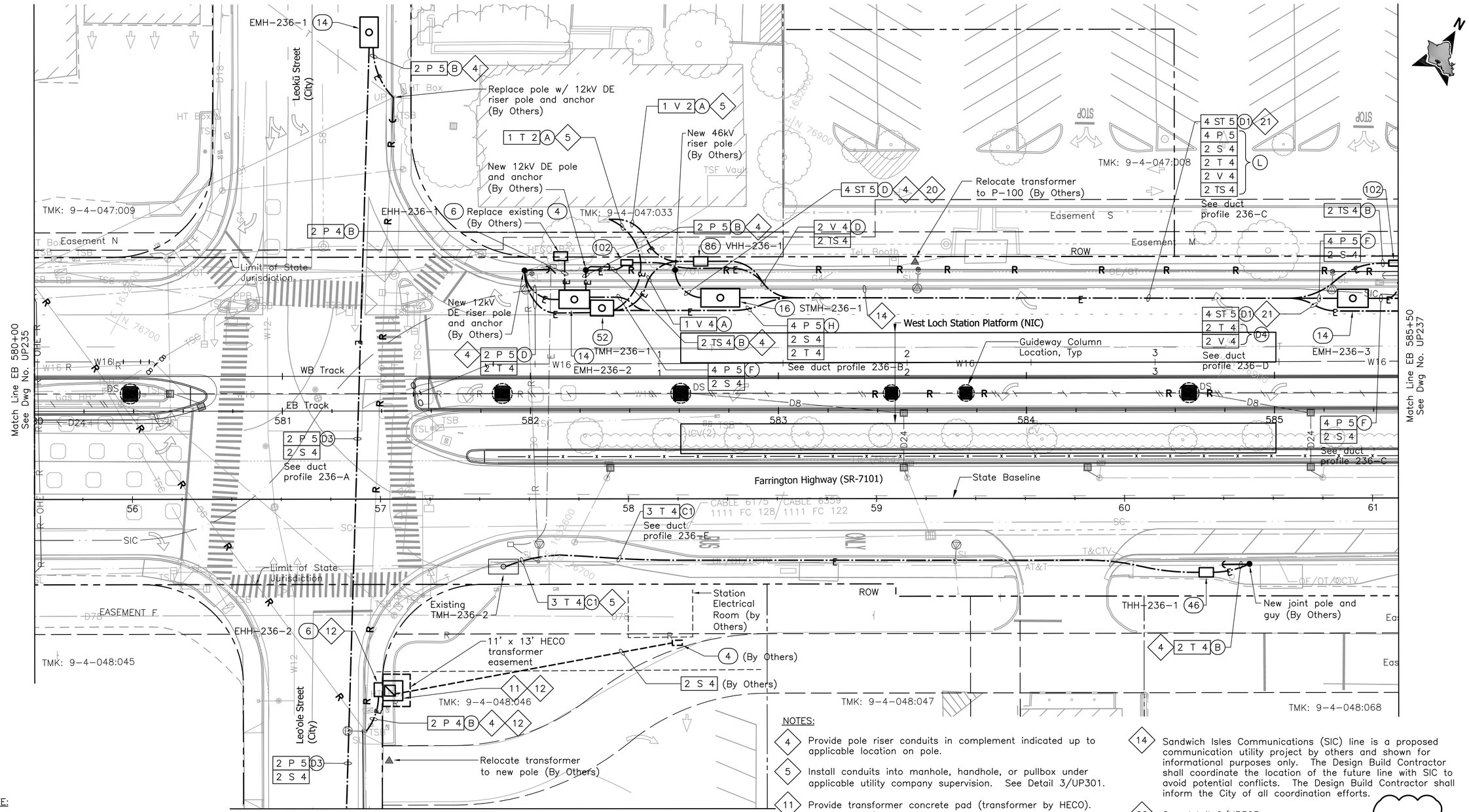
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 574+76.91 TO EB 580+00

Contract No.: DB-1200
CADD File: WF-D03-UP235
Drawing No.: UP235
Rev.: B
Scale: 1"=20'
Page No.: 177 of 314

P:\01_PROJECTS\2007\07081-HHCTC\SEC4_C\dwg\WF-D03-UP235-UP307.dwg, WF-D03-UP235, 5/18/2009 4:12:27 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

11 Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20 See detail 2/UP303.

21 See detail 3/UP303.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 580+00 TO EB 585+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP236
Drawing No.: UP236 Rev. B
Scale: 1"=20'
Page No. 179 of 314

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Match Line
See Dwg No. UP236

Continuation of duct profile 236–A

EMH–236A–1 (14)

4 | 2 P 5 C2 | 1 S 4

See duct profile 236A–A

New 12kV pole & riser (By Others)

New pole & relocated transformer (By Others)

Leo'ole Street (City)

OHE/12kV/N

E 163200 N 76500

Demolition of OH lines on this property to be done by Others

Easement

Systems Site #5

Existing HECO riser pole. HECO to convert to double–dead–end pole

12 | 2 P 4 B

6 | 12 EHH–236A–1

2 P 4 B | 4

OHE/12kV/N

New HECO riser pole (By Others)

eOH/12kV

eOH/V

eOH/T

eOH/12kV/N

eOH/T/V

Leonui Street (City)

E 163200 N 76300

E 163000 N 76500

eOH/S/T/V

eOH/T/V

OHE/12kV/T/V

OHE/12kV/T/V

Mid–span tap

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 580+00 TO EB 585+50 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP236A
Drawing No.: UP236A
Rev.: B
Scale: 1"=20'
Page No.: 180 of 314

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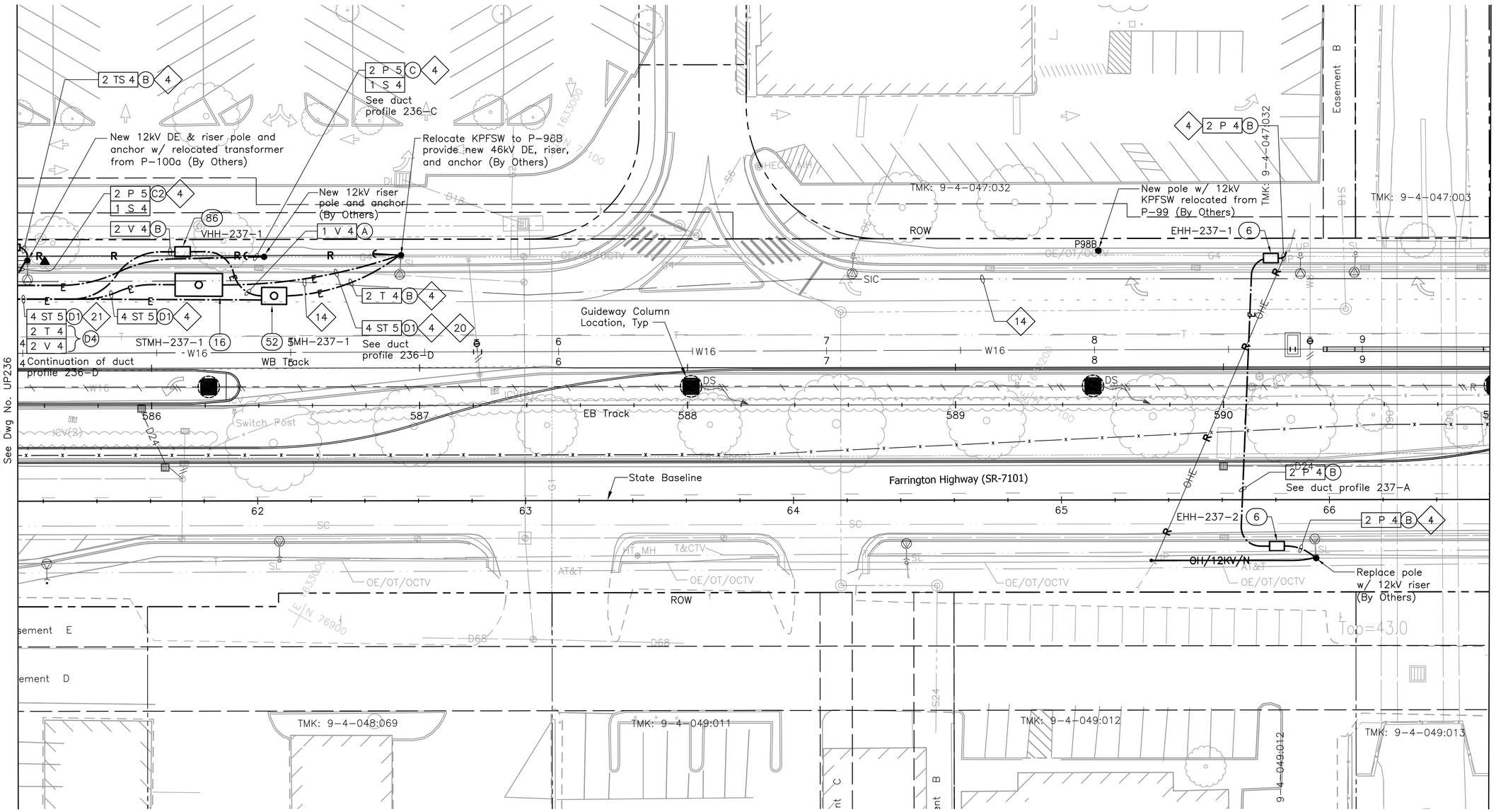

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20 See detail 2/UP303.

21 See detail 3/UP303.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 585+50 TO EB 591+00

Contract No.: DB-1200
CADD File: WF-D03-UP237
Drawing No: UP237 Rev. B
Scale: 1"=20'
Page No. 184 of 314

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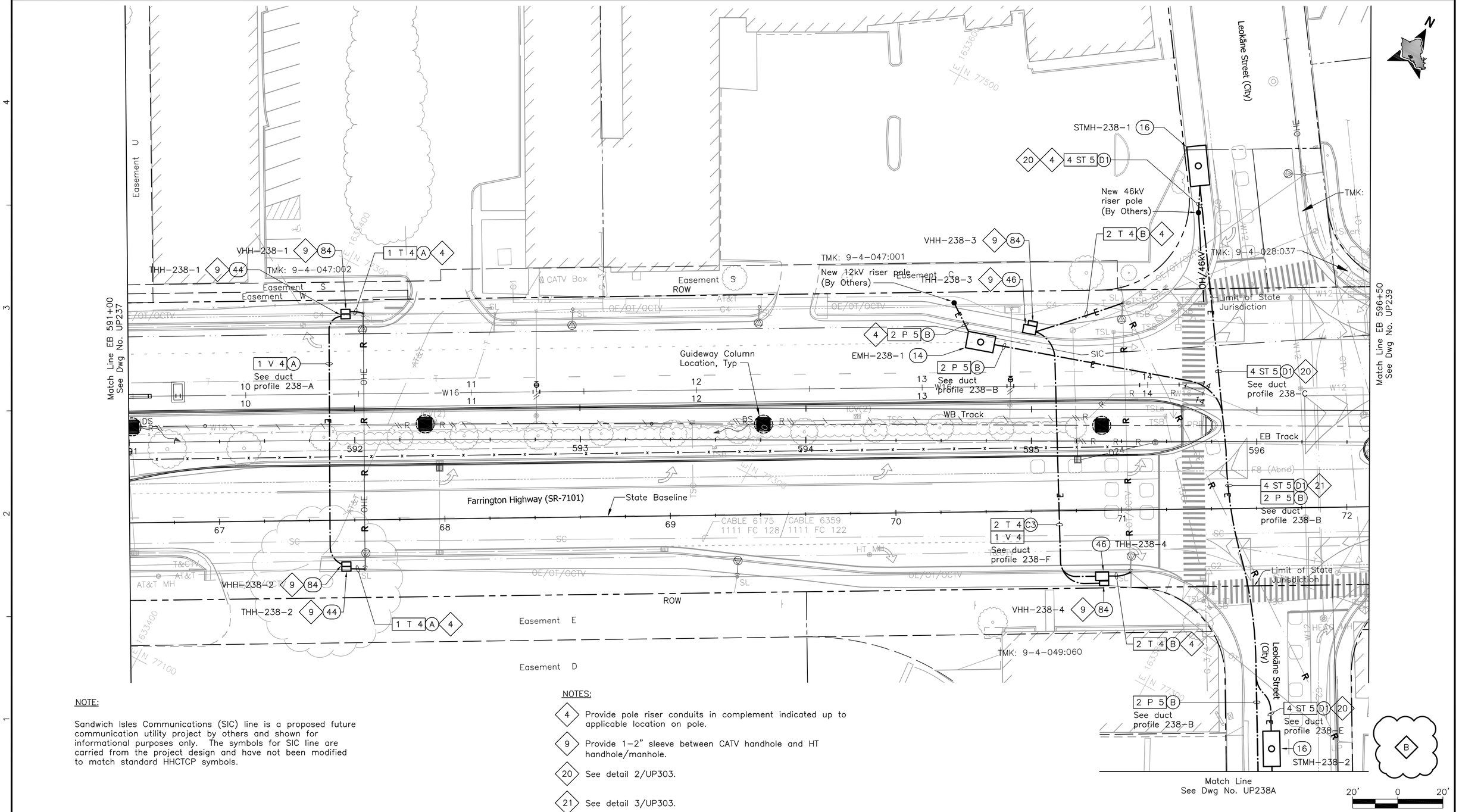

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

9 Provide 1–2" sleeve between CATV handhole and HT handhole/manhole.

20 See detail 2/UP303.

21 See detail 3/UP303.

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 591+00 TO EB 596+50 SHEET 1 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP238
Drawing No: UP238 Rev. B
Scale: 1"=20'
Page No. 186 of 314

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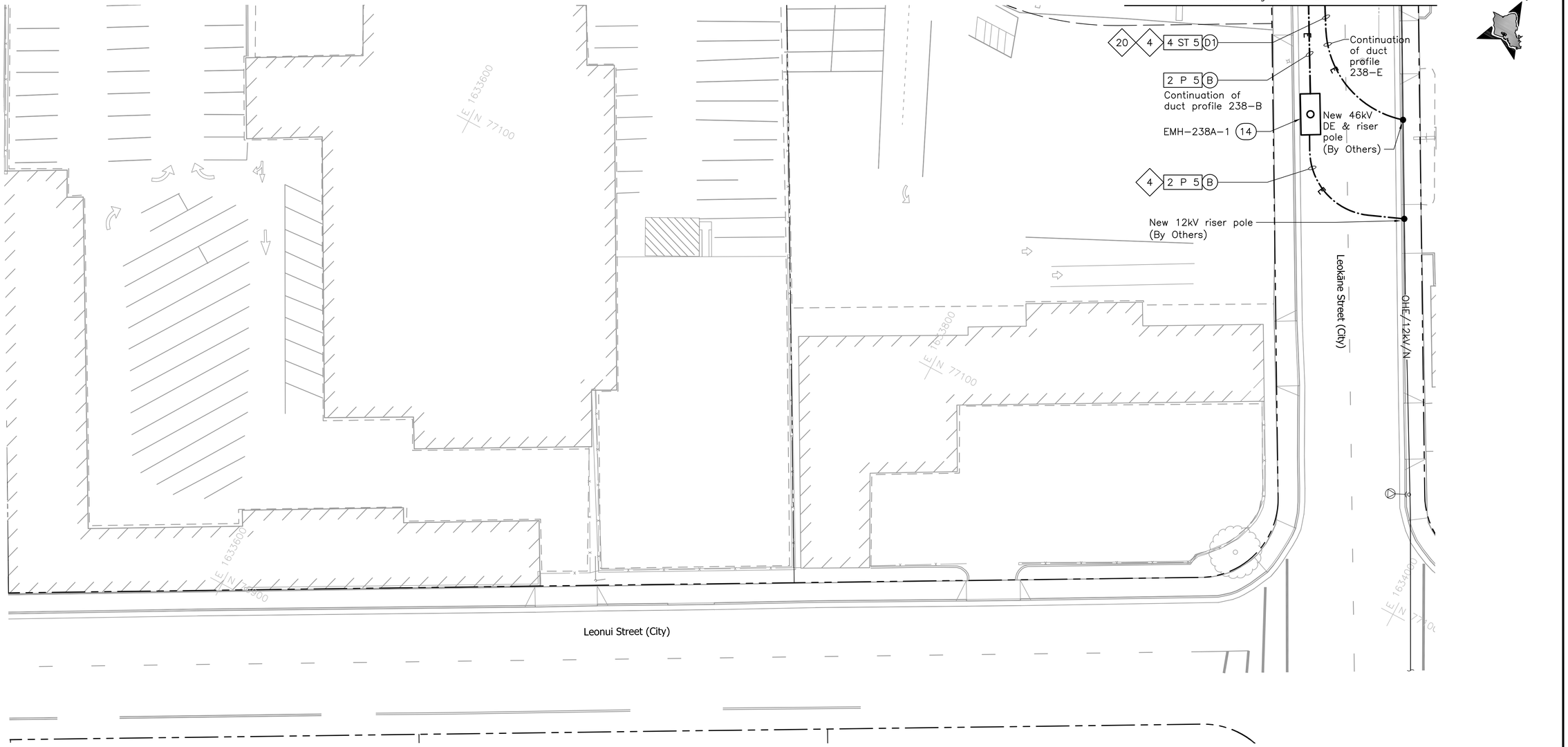

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

20 See detail 2/UP303.

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 591+00 TO EB 596+50 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP238A
Drawing No: UP238A
Rev.: B
Scale: 1"=20'
Page No.: 187 of 314

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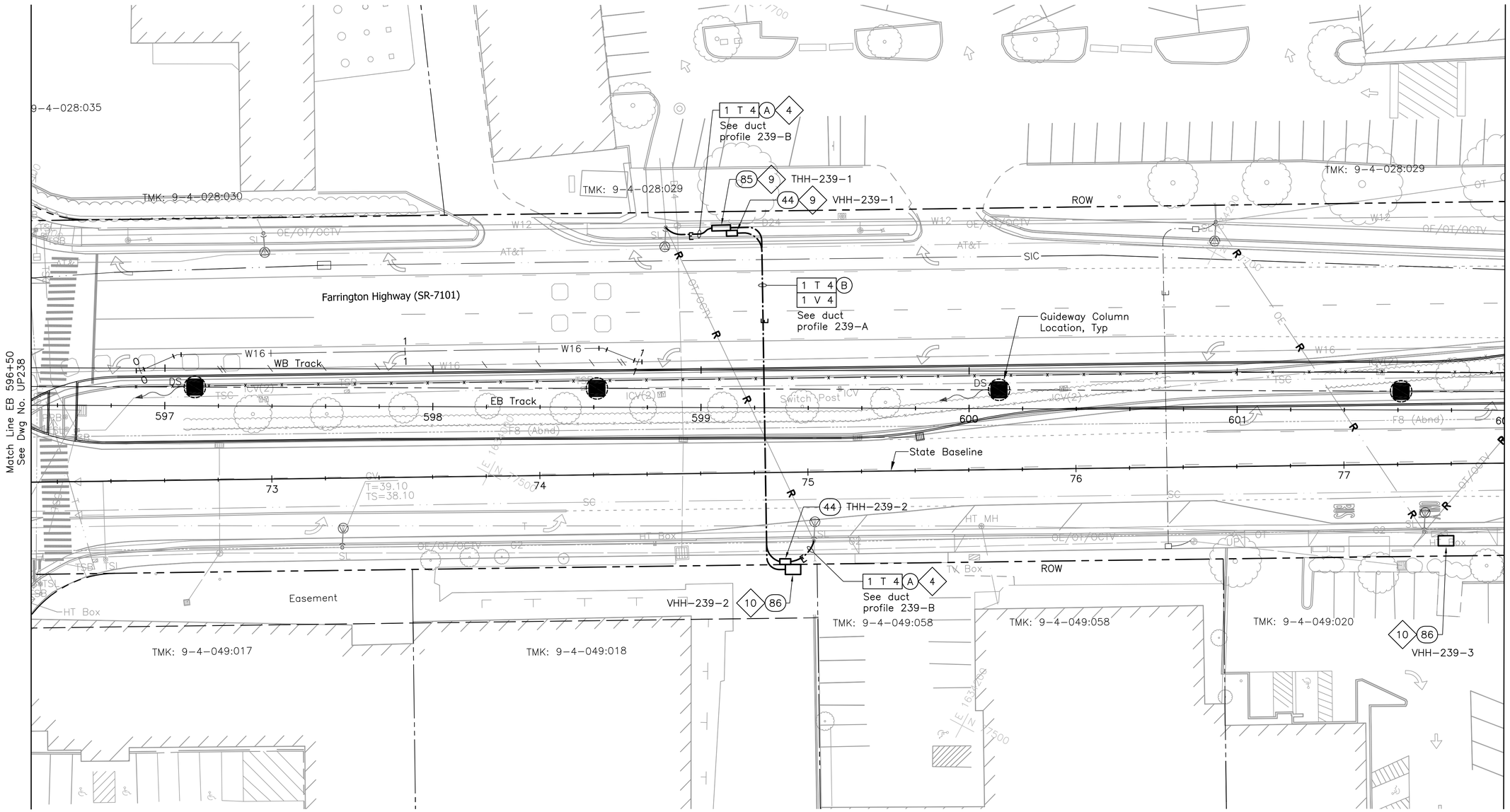

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, pullboxes, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

9 Provide 1-2" sleeve between CATV handhole and HT handhole/manhole.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 596+50 TO EB 602+00

Contract No.: DB-1200
CADD File: WF-D03-UP239
Drawing No: UP239 Rev. B
Scale: 1"=20'
Page No. 190 of 314

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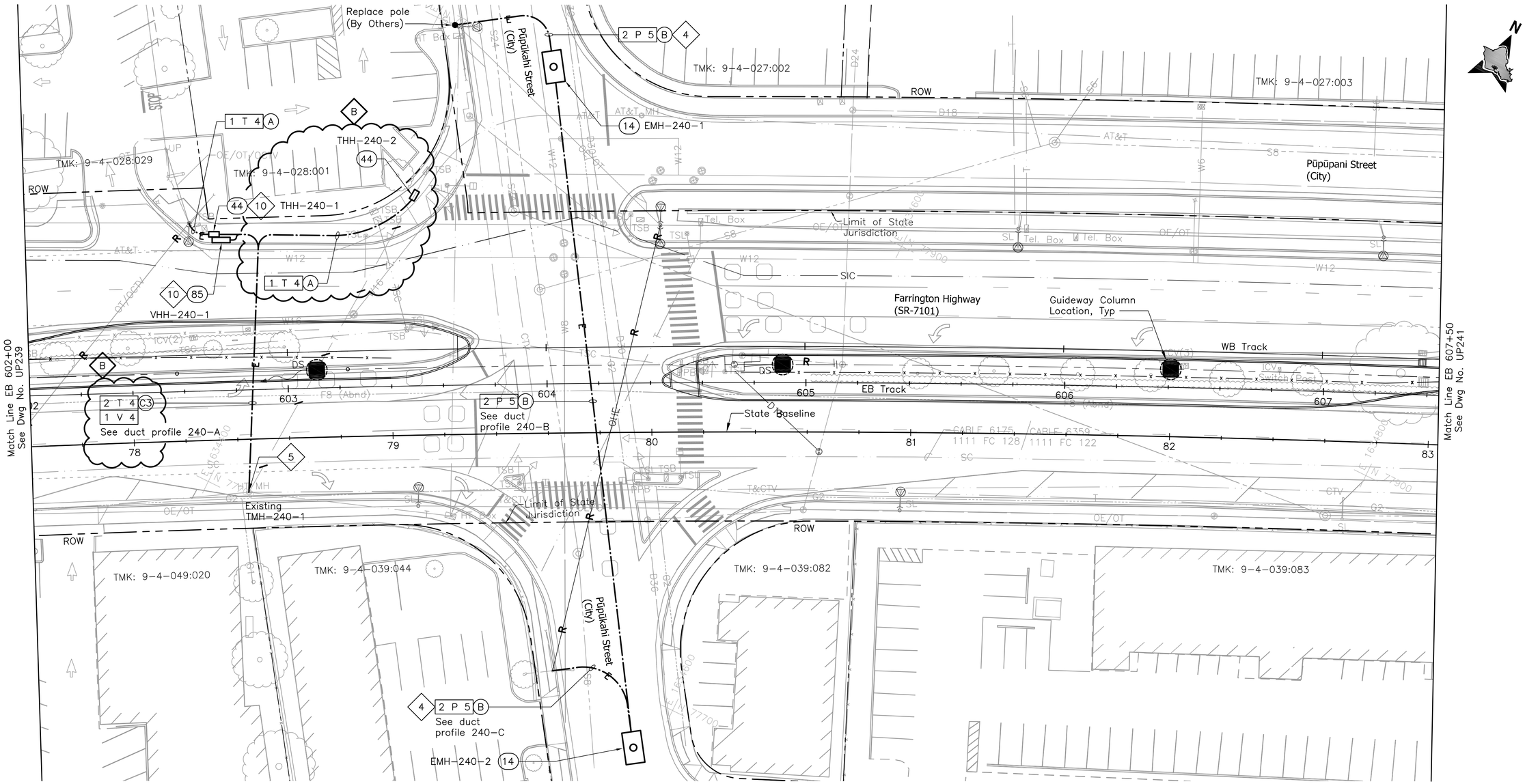

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Added HT Ductline
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
ELECTRICAL & COMMUNICATIONS

EB 602+00 TO EB 607+50

Contract No.: DB-1200
CADD File: WF-D03-UP240
Drawing No: UP240 Rev. B
Scale: 1"=20'
Page No. 192 of 314

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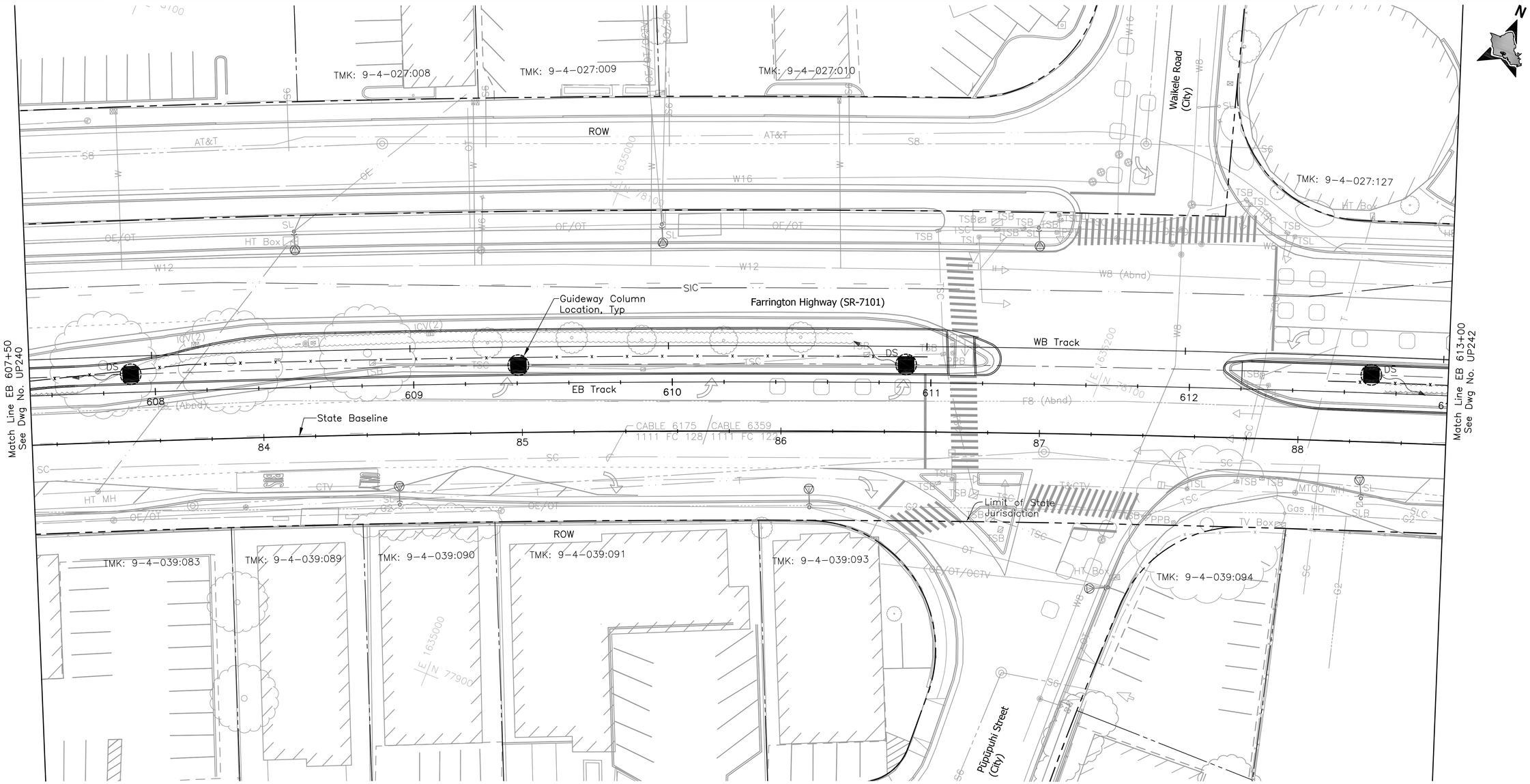

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 607+50 TO EB 613+00

Contract No.: DB-1200
CADD File: WF-D03-UP241
Drawing No: UP241 Rev. A
Scale: 1"=20'
Page No. 194 of 314

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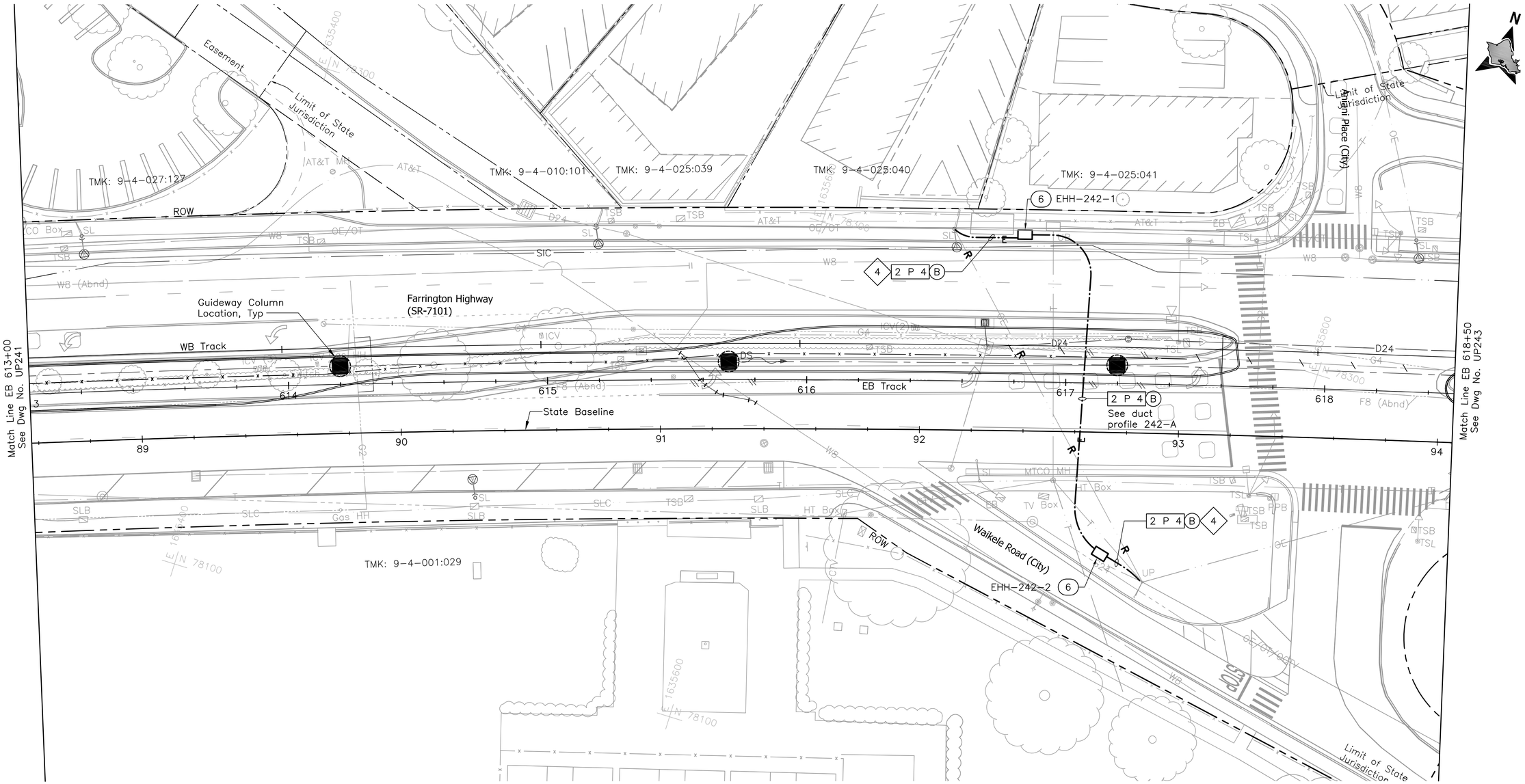

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 613+00 TO EB 618+50

Contract No.: DB-1200
CADD File: WF-D03-UP242
Drawing No: UP242 Rev. B
Scale: 1"=20'
Page No. 195 of 314

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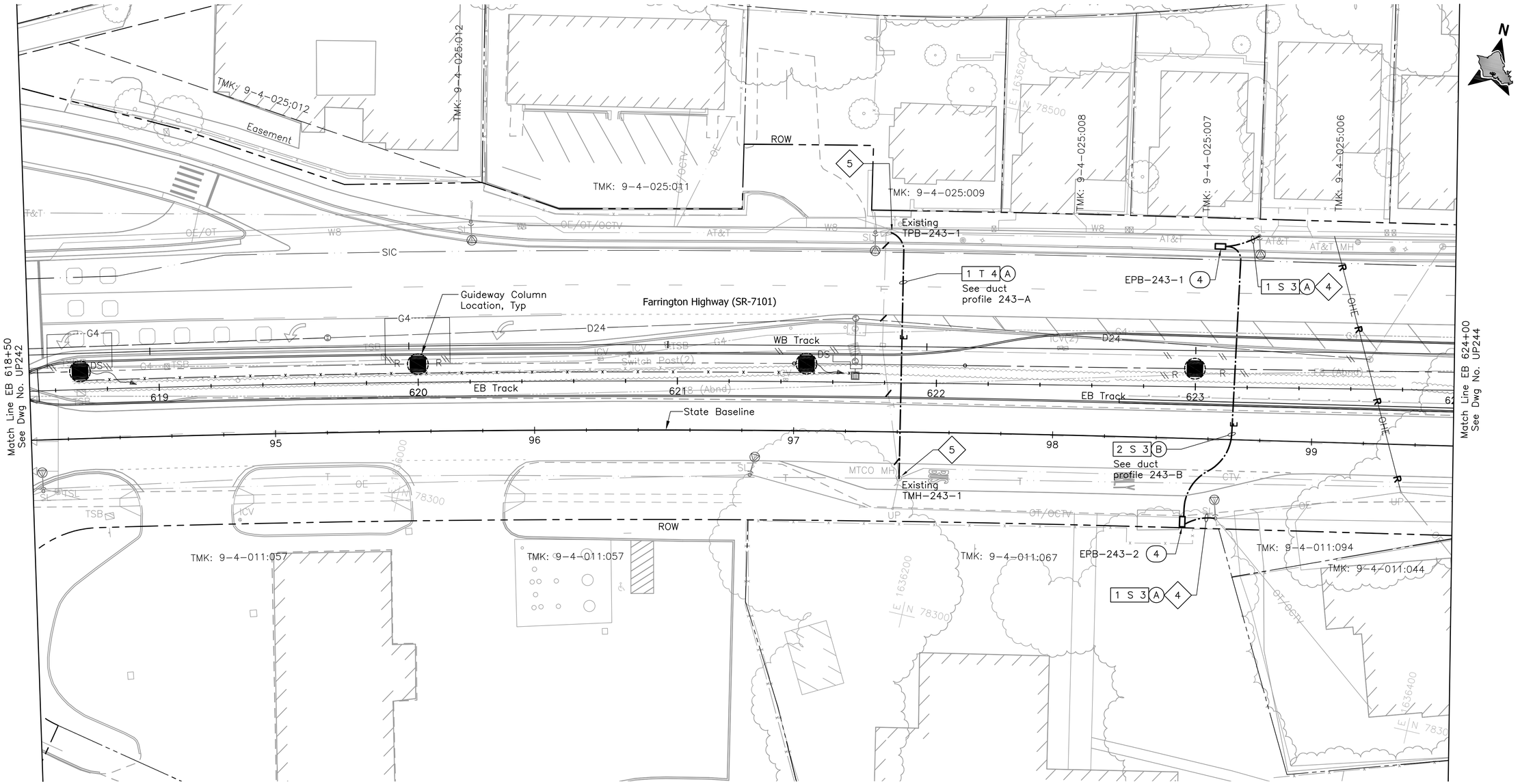

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NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB AECOM PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 618+50 TO EB 624+00

Contract No.: DB-1200
CADD File: WF-D03-UP243
Drawing No.: UP243 Rev. B
Scale: 1"=20'
Page No. 197 of 314

P:\01_PROJECTS\2007\2070181-HHCTCSEIS-B_Cseg\WF-D03-UP\25-UP287.dwg, WF-D03-UP243, 5/20/2009 10:18:58 AM, dsyn, 1:1

Match Line EB 624+00
See Dwg No. UP243

Match Line EB 629+50
See Dwg No. UP245

TMK: 9-4-025:005
TMK: 9-4-025:004
TMK: 9-4-025:003
TMK: 9-4-025:002
TMK: 9-4-025:001
TMK: 9-4-010:027
TMK: 9-4-010:008
TMK: 9-4-011:044
TMK: 9-4-011:042
TMK: 9-4-011:041
TMK: 9-4-011:037

Easement
ROW
Kinney Place (City)
Farrington Highway (SR-7101)
State Baseline
WB Track
EB Track
Guideway Column Location, Typ
Existing TMH-244-2
New 12kV riser (By Others)
H-Frame
Walkele Stream

4 1 S 3 A
4 2 P 4 D
2 T 4
1 V 4 A
VHH-244-1 85
2 V 4 B
3
SIC
2 S 3 B
See duct profile 244-A
4 EPB-244-1
EMH-244-1 14
TMH-244-1 50
2 T 4 B
Tel. Box
2 P 4 F4
2 T 4
2 V 4
See duct profile 244-B
D24
G3
DS
625
626
627
628
629
100
101
102
103
104
105
EMH-244-2 14
2 P 4 B
EPB-244-2 4
VHH-244-2 85
1 S 3 A 4
2 V 4 B
2 T 4 B 5
1 V 4 A 5
2 P 4 B 4
6
B

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3 Convert pole to self-sustaining metal pole (by HECO).

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Extend 12KV Ductline
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

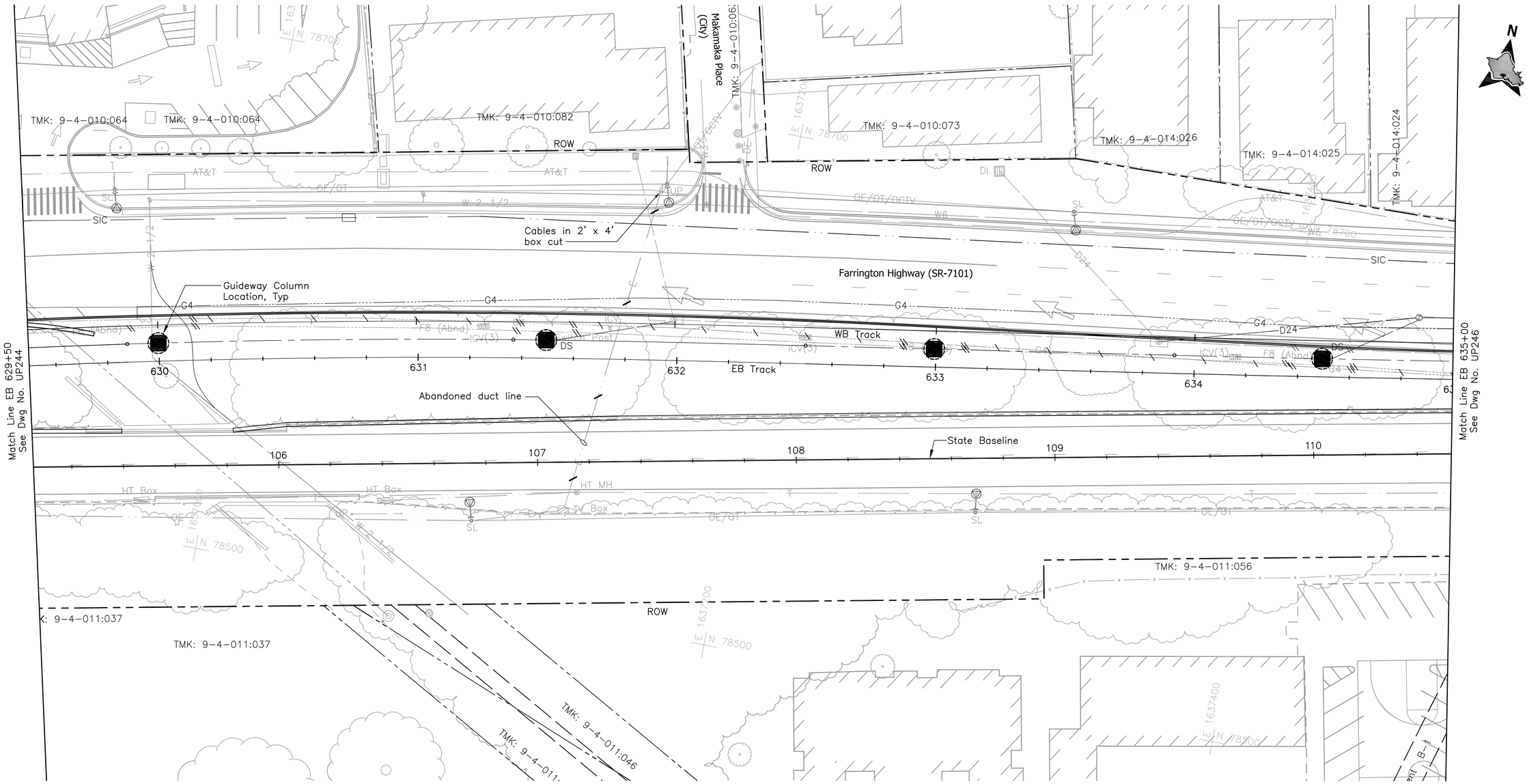
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 624+00 TO EB 629+50

Contract No.: DB-1200
CADD File: WF-D03-UP244
Drawing No.: UP244 Rev. B
Scale: 1"=20'
Page No. 199 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Cvlng\WF-D03-UP235-UP287.dwg, WF-D03-UP244, 5/19/2009 4:21:08 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 629+50 TO EB 635+00

Contract No.: DB-1200
CADD File: WF-D03-UP245
Drawing No: UP245 Rev. A
Scale: 1"=20'
Page No. 201 of 314

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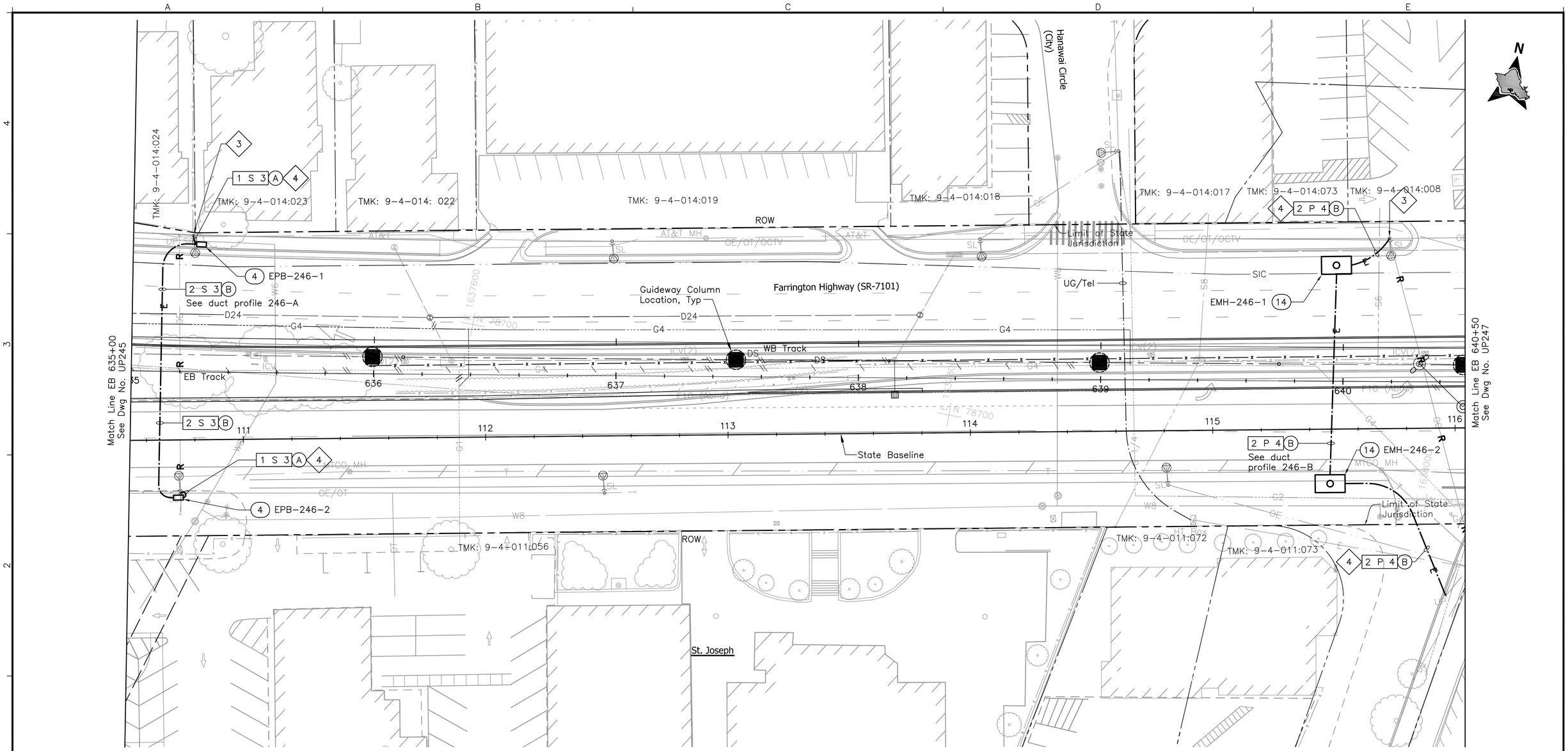

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3 Convert pole to self-sustaining metal pole (by HECO).

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
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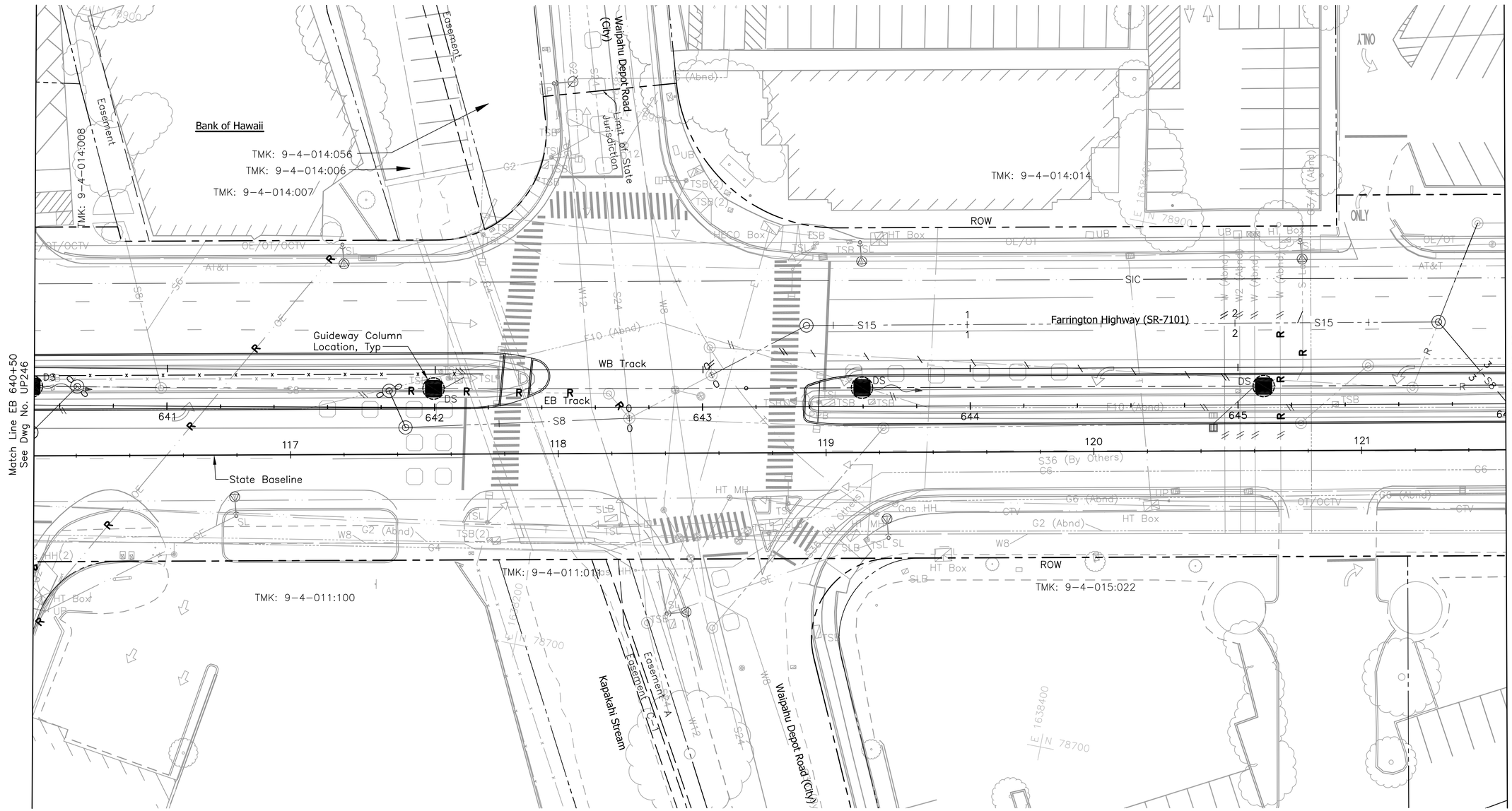
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 635+00 TO EB 640+50

Contract No.: DB-1200
CADD File: WF-D03-UP246
Drawing No: UP246 Rev. B
Scale: 1"=20'
Page No. 202 of 314

P:\01_PROJECTS\2007\07018-HHCTC\EIS\4_Cdwg\WF-D03-UP235-UP287.dwg, WF-D03-UP245, 5/19/2009 4:22:16 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB AECOM PARSONS BRINCKERHOFF
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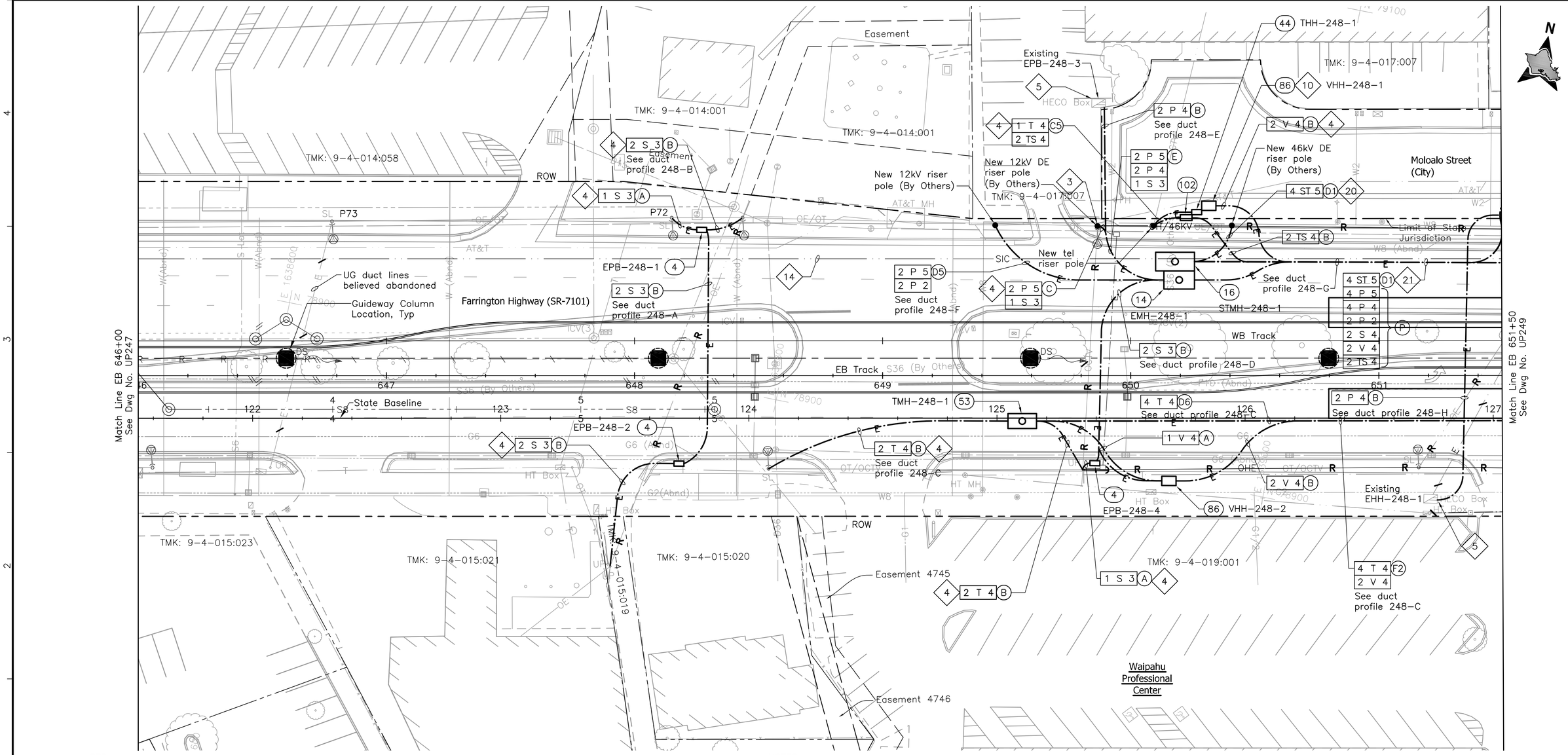
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 640+50 TO EB 646+00

Contract No.: DB-1200
CADD File: WF-D03-UP247
Drawing No.: UP247 Rev. A
Scale: 1"=20'
Page No. 204 of 314

P:\01_PROJECTS\2007\2078\81-HHCTCS\EIS-B_Dwg\WF-D03-UP235-UP247.dwg, WF-D03-UP247, 5/19/2009 4:22:49 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3. Convert pole to self-sustaining metal pole (by HECO).
4. Provide pole riser conduits in complement indicated up to applicable location on pole.
5. Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.
10. Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.
14. Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.
20. See detail 2/UP303.
21. See detail 3/UP303.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

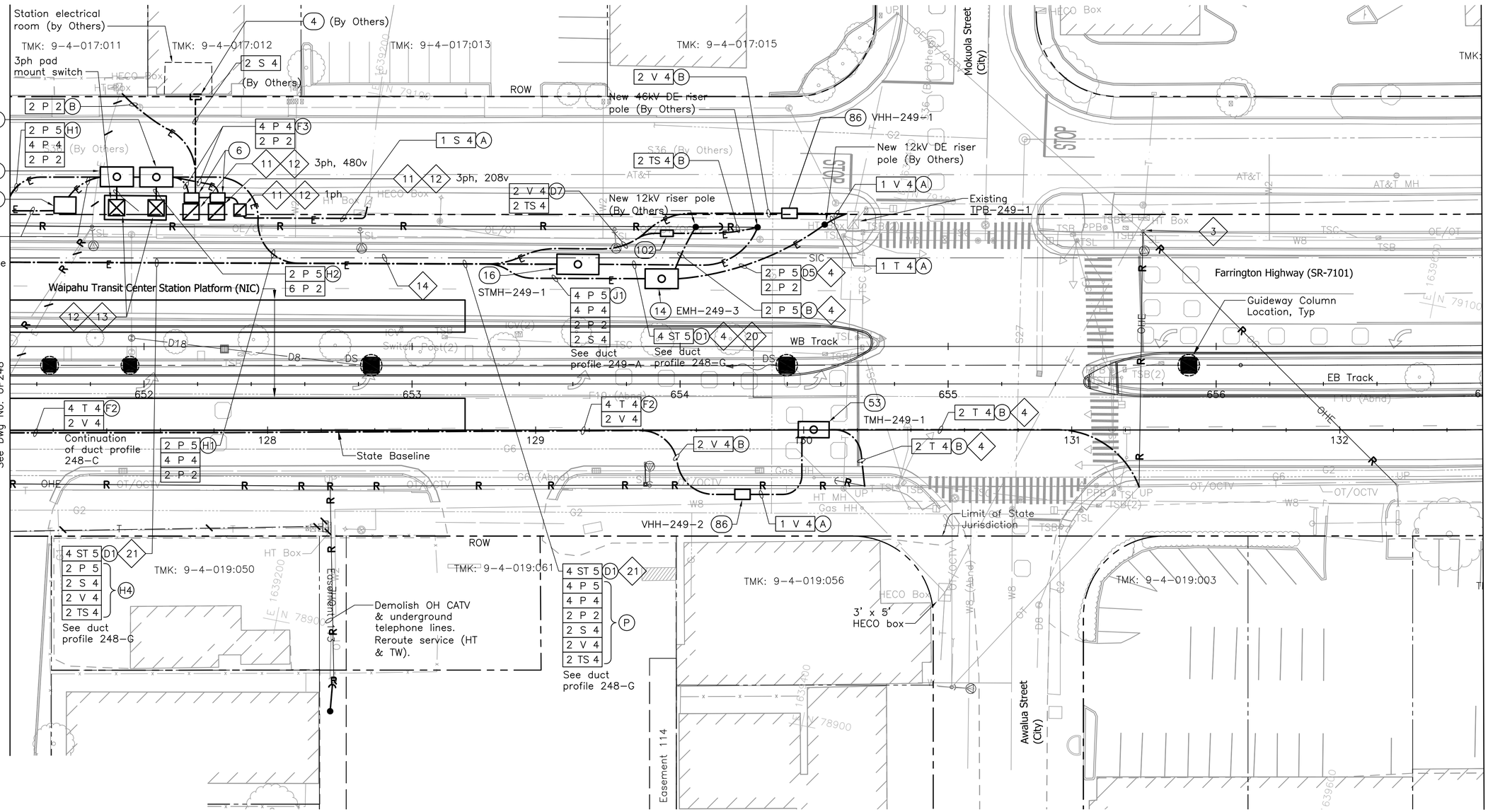
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 646+00 TO EB 651+50

Contract No.: DB-1200
CADD File: WF-D03-UP248
Drawing No.: UP248 Rev. B
Scale: 1"=20'
Page No. 205 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Dwg\WF-D03-UP235-UP287.dwg, WF-D03-UP248, 5/19/2009 4:23:33 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3. Convert pole to self-sustaining metal pole (by HECO).
4. Provide pole riser conduits in complement indicated up to applicable location on pole.
11. Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.
12. Preliminary new HECO service design only; to be finalized by Design Build Contractor.
13. Provide switchgear concrete pad (switchgear by HECO). See details 1/UP307 & 2/UP307.
14. Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 651+50 TO EB 657+00

Contract No.: DB-1200
CADD File: WF-D03-UP249
Drawing No.: UP249 Rev.: B
Scale: 1"=20'
Page No.: 212 of 314

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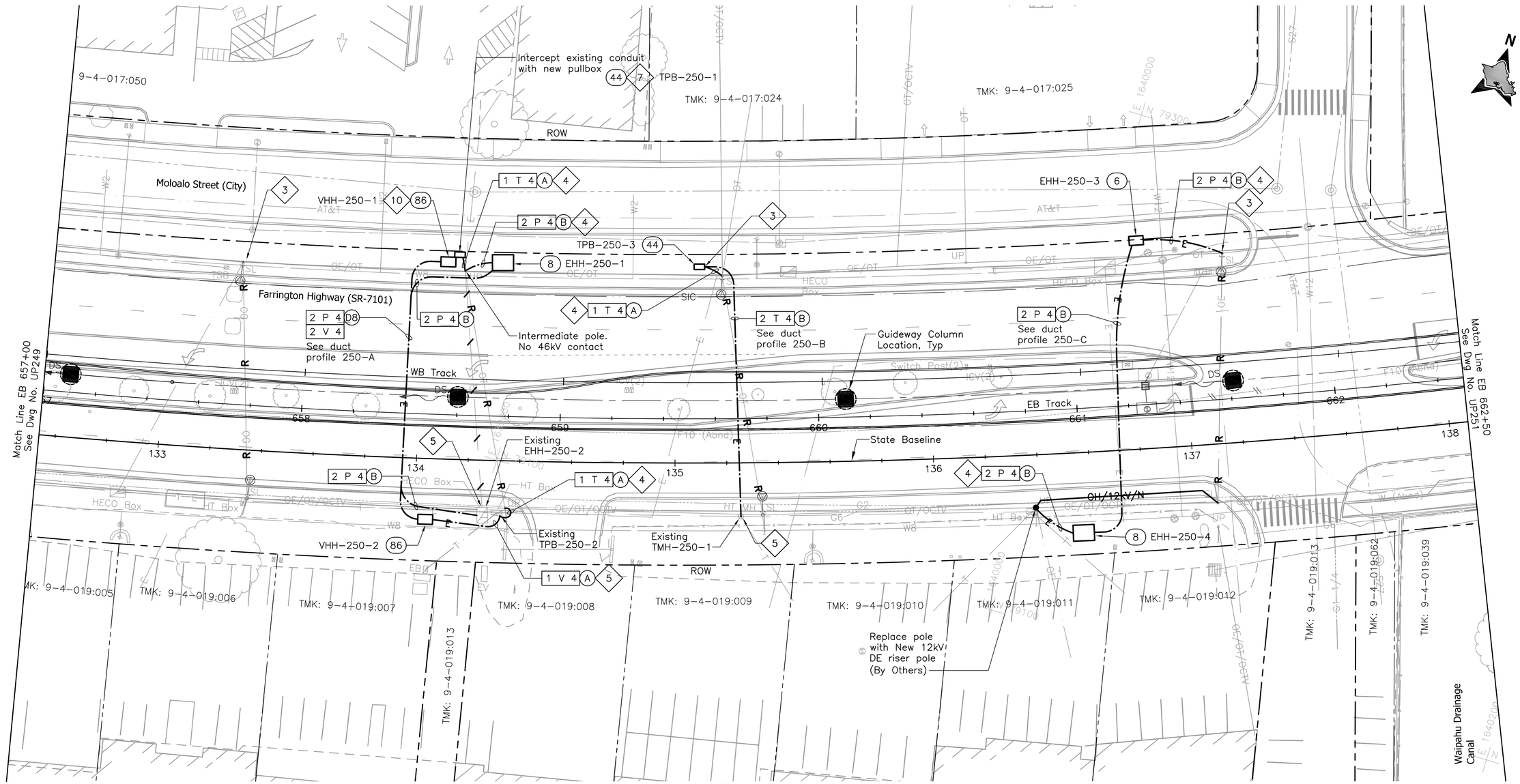

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3 Convert pole to self-sustaining metal pole (by HECO).

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

7 Intercept existing duct line with pullbox or handhole as indicated. Provide new duct line and wiring to clear new work. Make all electrical connections.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant: MKengineers
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For reduced prints, original page size in inches: 0 1 2 3 4

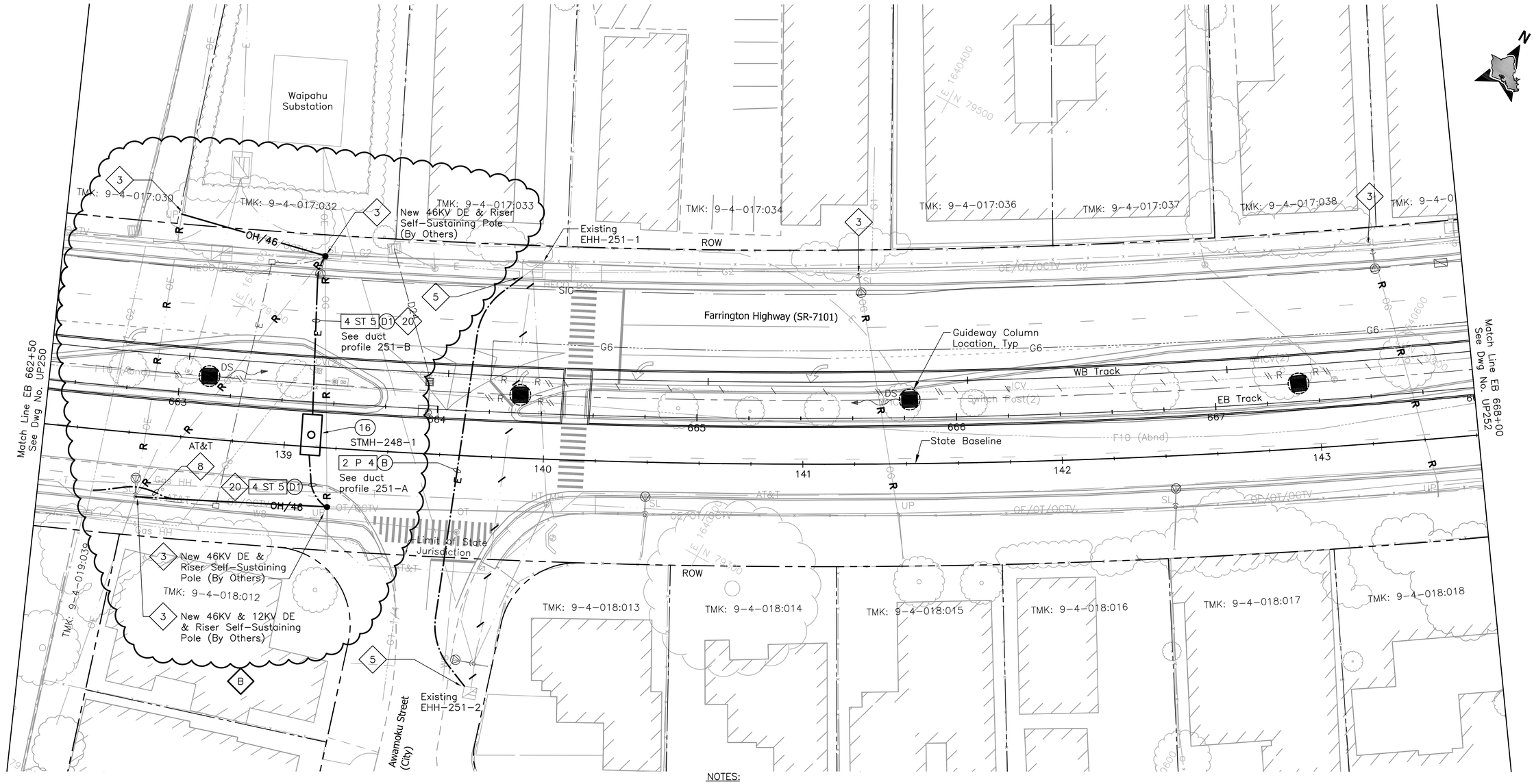
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 657+00 TO EB 662+50

Contract No.: DB-1200
CADD File: WF-D03-UP250
Drawing No: UP250 Rev. B
Scale: 1"=20'
Page No. 213 of 314

I:\PROJECTS\2007\07081-HHCTC\SEC&B_CDwg\WF-D03-UP235-UP307.dwg, WF-D03-UP250, 5/19/2009 4:24:44 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3 Convert pole to self-sustaining metal pole (by HECO).

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

8 Re-route conduits and cables around guideway column.

20 See detail 2/UP303.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Added 46KV Ductline; Relocated AT & T Ductline; Updated Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 662+50 TO EB 668+00

Contract No.: DB-1200
CADD File: WF-D03-UP251
Drawing No: UP251
Rev.: B
Scale: 1"=20'
Page No.: 215 of 314

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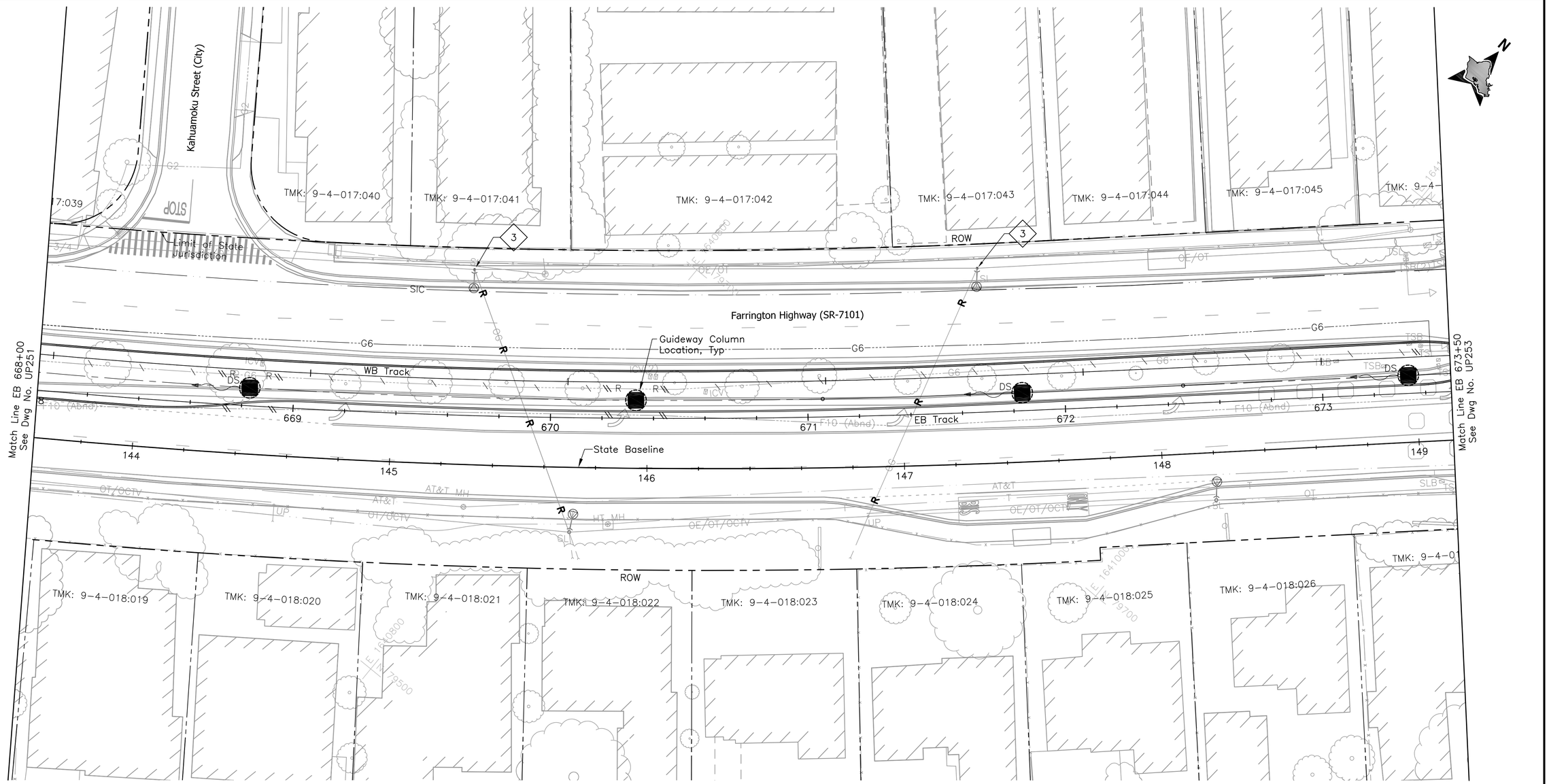

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

3 Convert pole to self-sustaining metal pole (by HECO).

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

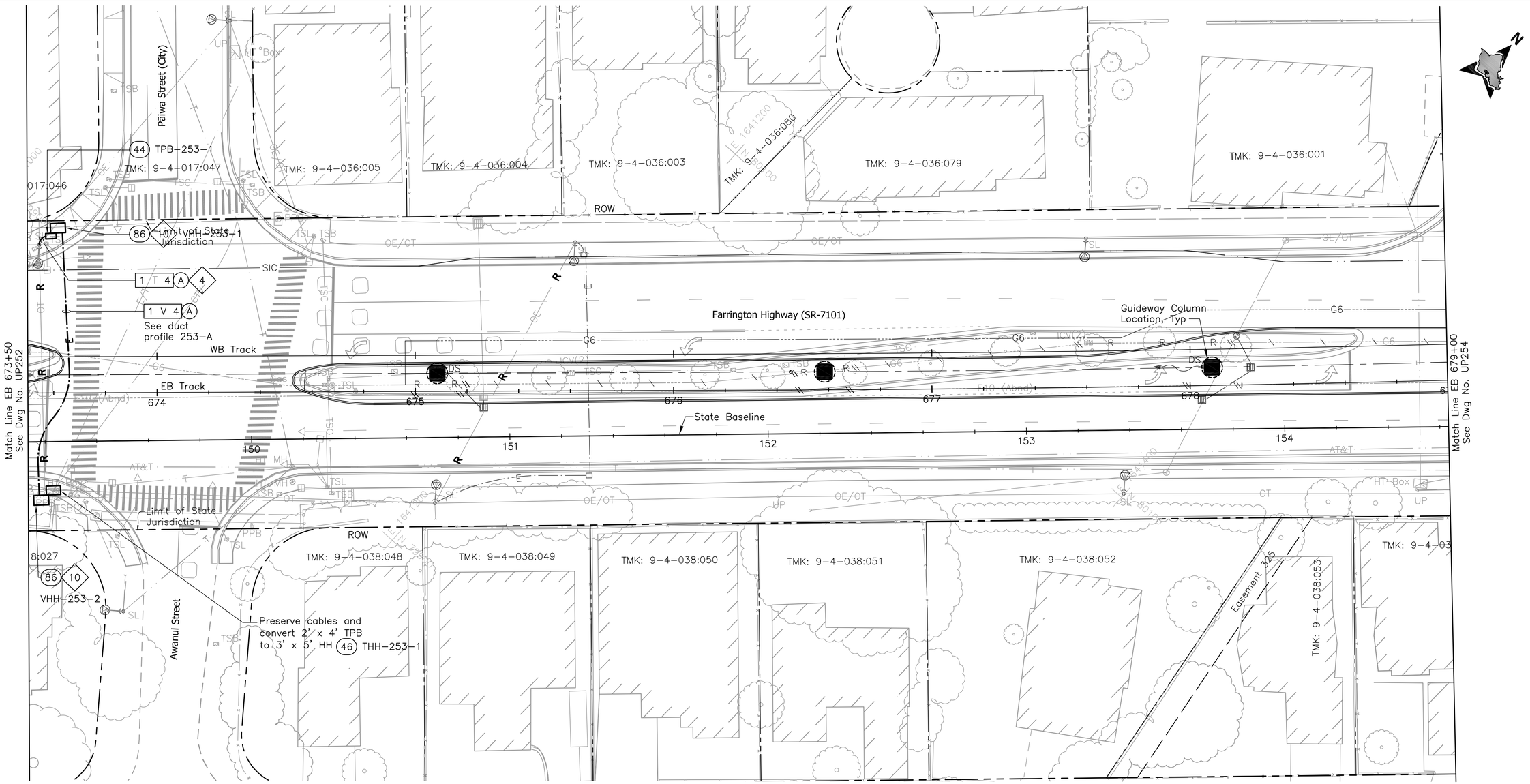
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 668+00 TO EB 673+50

Contract No.: DB-1200
CADD File: WF-D03-UP252
Drawing No.: UP252 Rev. A
Scale: 1"=20'
Page No. 217 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Cvlng\WF-D03-UP253-UP287.dwg, WF-D03-UP252, 5/19/2009 4:26:28 PM, dwyn, 1:1



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NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

10 Provide 1–4" sleeve between CATV handhole and HT handhole/manhole.

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 673+50 TO EB 679+00

Contract No.: DB–1200
CADD File: WF–D03–UP253
Drawing No.: UP253 Rev. B
Scale: 1"=20'
Page No. 218 of 314

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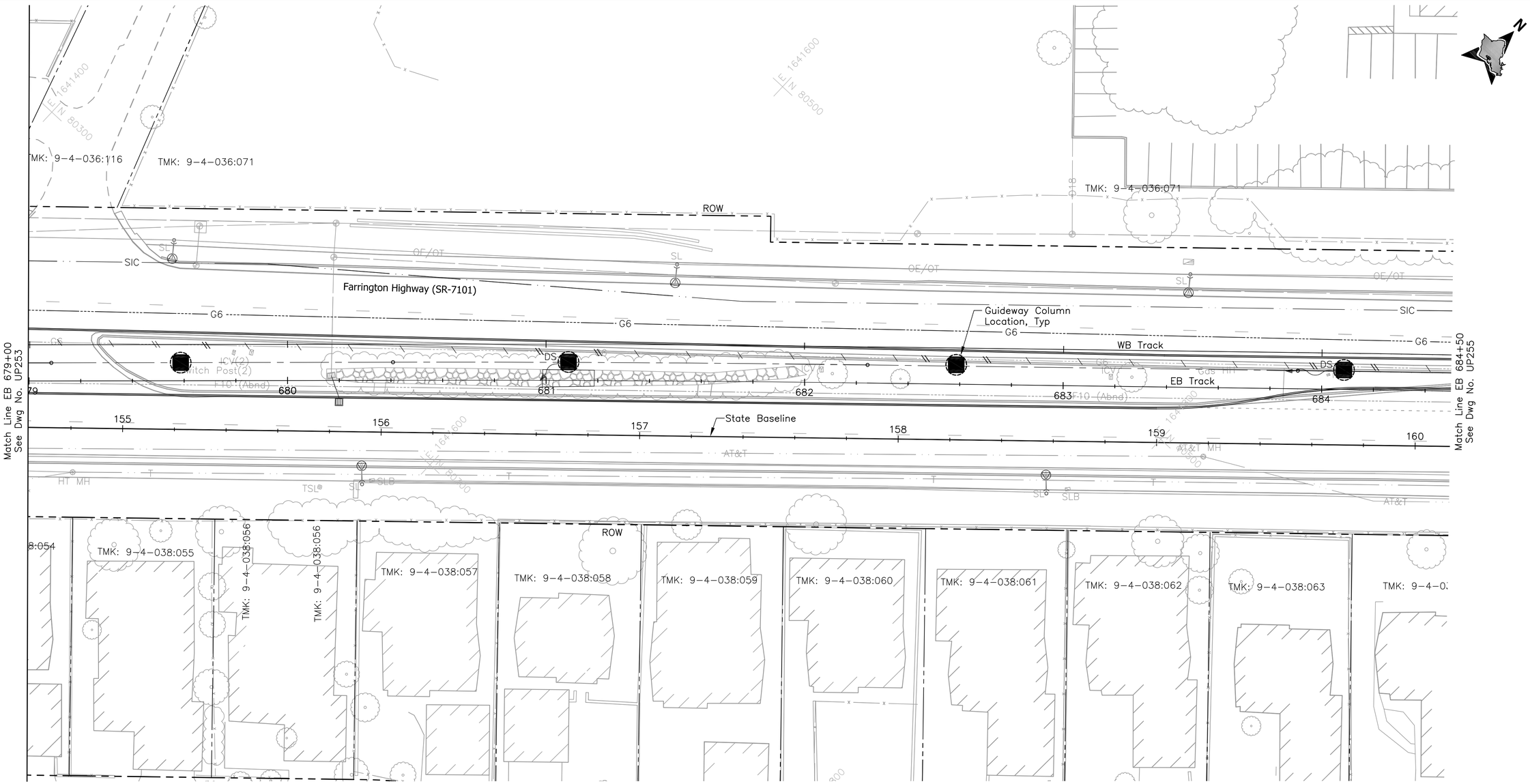

NOTE:

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20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 679+00 TO EB 684+50

Contract No.: DB-1200
CADD File: WF-D03-UP254
Drawing No: UP254 Rev. A
Scale: 1"=20'
Page No. 220 of 314

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Match Line EB 684+50
See Dwg No. UP254

Match Line EB 690+00
See Dwg No. UP256

Kahuali'i Street (City)

TMK: 9-4-045:027

TMK: 9-4-045:025

TMK: 9-4-045:026

TMK: 9-4-045:024

TMK: 9-4-036:071

TMK: 9-4-038:064

TMK: 9-4-038:065

TMK: 9-4-038:066

TMK: 9-4-038:067

Remove KwHm/CB for old traffic controller after new system is in operation

Relocate transformer to P-54Y (By Others)

For Drainage Purposes Easement 27 (10 Ft. Wide)

ROW

P-56

P-55X1

P-55

Limit Of State Jurisdiction

Farrington Highway (SR-7101)

Guideway Column Location, Typ

New self-sustaining 12kV DE riser pole (by HECO)

EB Track

WB Track

State Baseline

685

686

687

688

689

161

162

163

164

165

EPB-255-1

EPB-255-2

EPB-255-3

TPB-255-1

VHH-255-1

EMH-255-1

EHH-255-1

1 T 4 A 4

4 1 S 3 A

4 2 P 5 B

2 P 5 B

2 P 5 02 4

2 V 4

2 S 3 B

See duct profile 255-A

See duct profile 255-B

See duct profile 255-C

New 95 see traffic signal dwgs

New traffic controller

New civil defense warning pole

1 S 2 A

New KwHm/CB for traffic controller, see detail A SL412

Remove civil defense warning siren, pole and foundation. Provide new pole, relocate equipment thereto and test under Hawaiian State Civil Defense supervision. See details on sheets UP308 to UP311.

Remove telephone booth & pole under Hawaiian Telcom supervision and return to Hawaiian Telcom

Match Line See Dwg No. UP255A

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

7 Intercept existing duct line with pullbox or handhole as indicated. Provide new duct line and wiring to clear new work. Make all electrical connections.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Increased Handhole Size; Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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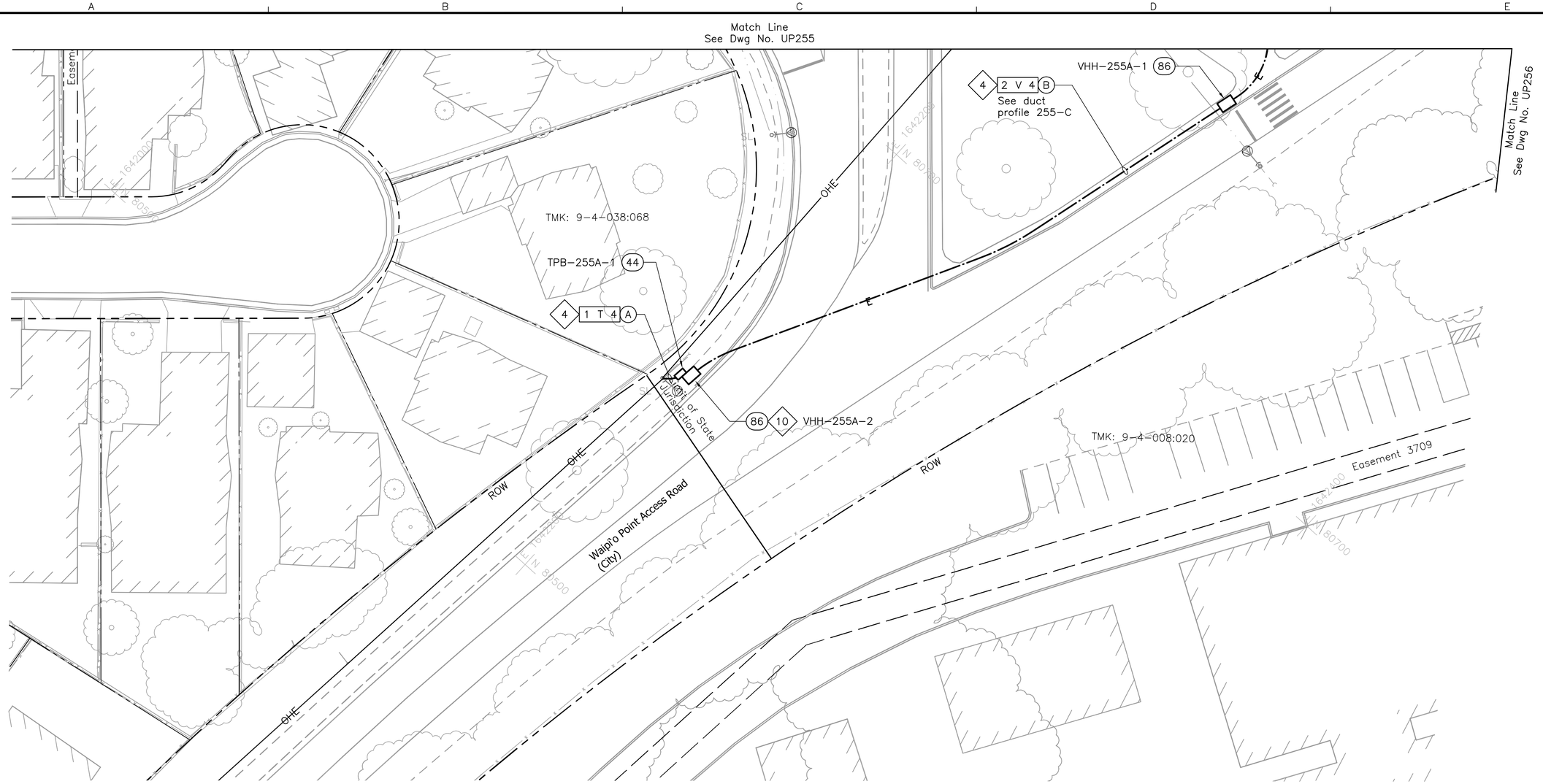
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 684+50 TO EB 690+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP255
Drawing No.: UP255 Rev.: B
Scale: 1"=20'
Page No.: 221 of 314

P:\01_PROJECTS\20072\708-HHCTC\SEC&_C\dwg\WF-D03-UP255-UP307.dwg, WF-D03-UP255, 5/19/2009 4:34:34 PM, dayn, 1:1



NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

10 Provide 1–4" sleeve between CATV handhole and HT handhole/manhole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 684+50 TO EB 690+00 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP255A
Drawing No: UP255A Rev. B
Scale: 1"=20'
Page No. 222 of 314

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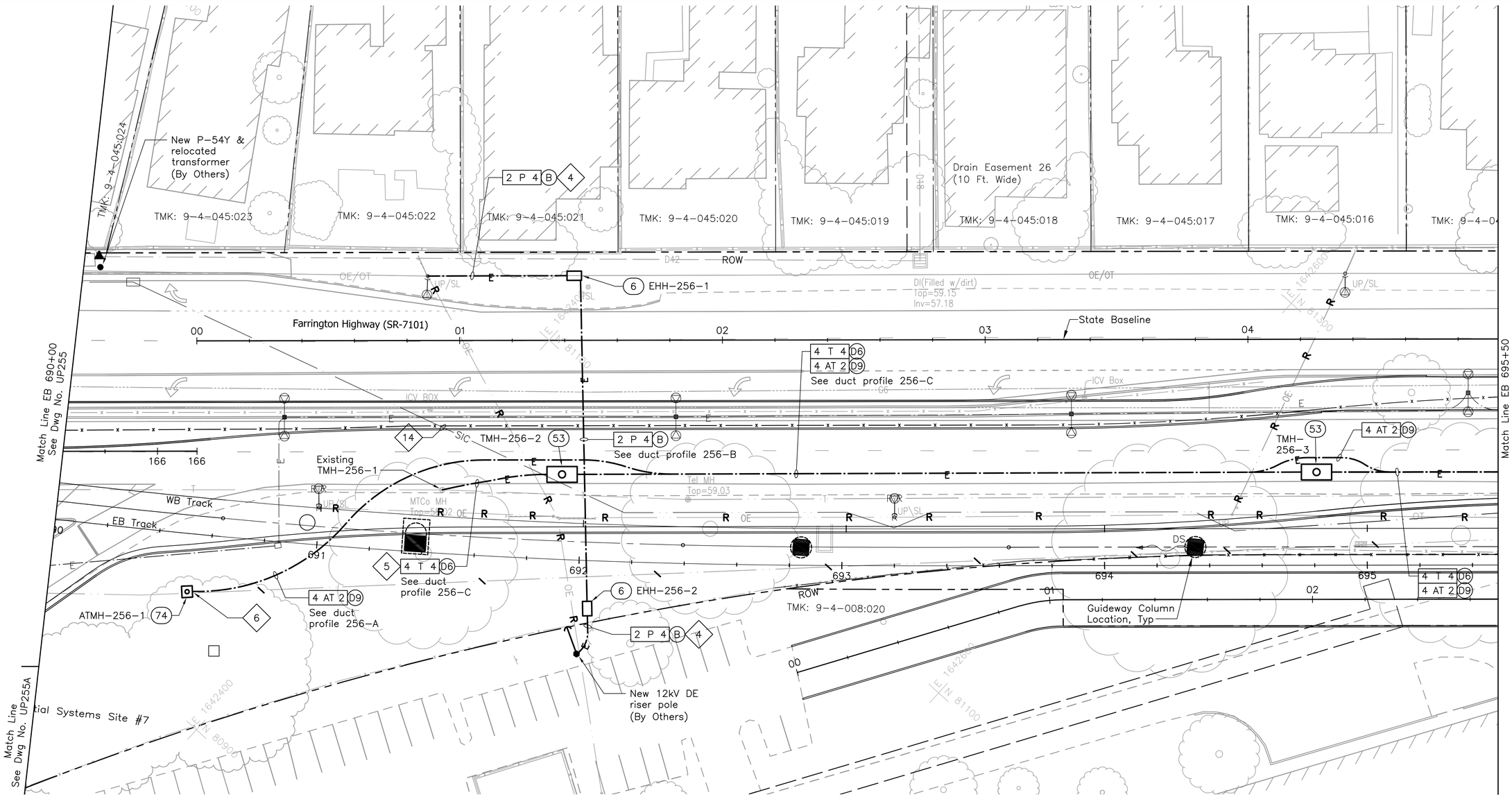

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole under applicable utility company supervision. See Detail 3/UP301.

6 Intercept existing duct line with new manhole. Demolish concrete jacket and duct within manhole and expose cables. preserve cables during demolition of duct.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

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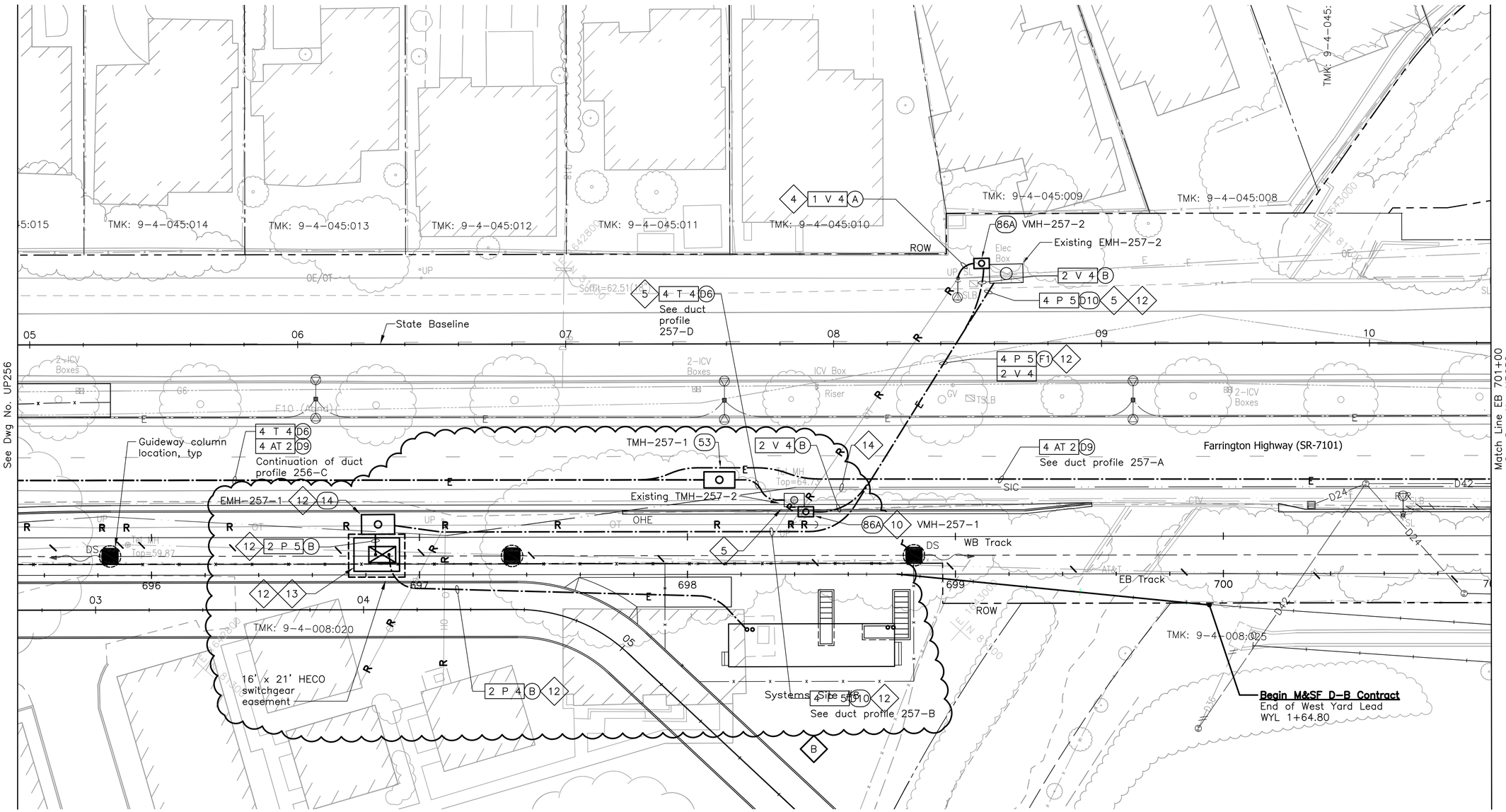
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 690+00 TO EB 695+50

Contract No.: DB-1200
CADD File: WF-D03-UP256
Drawing No: UP256 Rev. B
Scale: 1"=20'
Page No. 225 of 314

P:\01_PROJECTS\20070708\HHCTCSES-8_CDwg\WF-D03-UP235-UP307.dwg, WF-D03-UP256, 5/19/2009 4:33:54 PM, depn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

10 Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

13 Provide switchgear concrete pad (switchgear by HECO). See detail 1/UP305.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Relocated HECo Switchgear;
			Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 695+50 TO EB 701+00

Contract No.: DB-1200
CADD File: WF-D03-UP257
Drawing No.: UP257 Rev. B
Scale: 1"=20'

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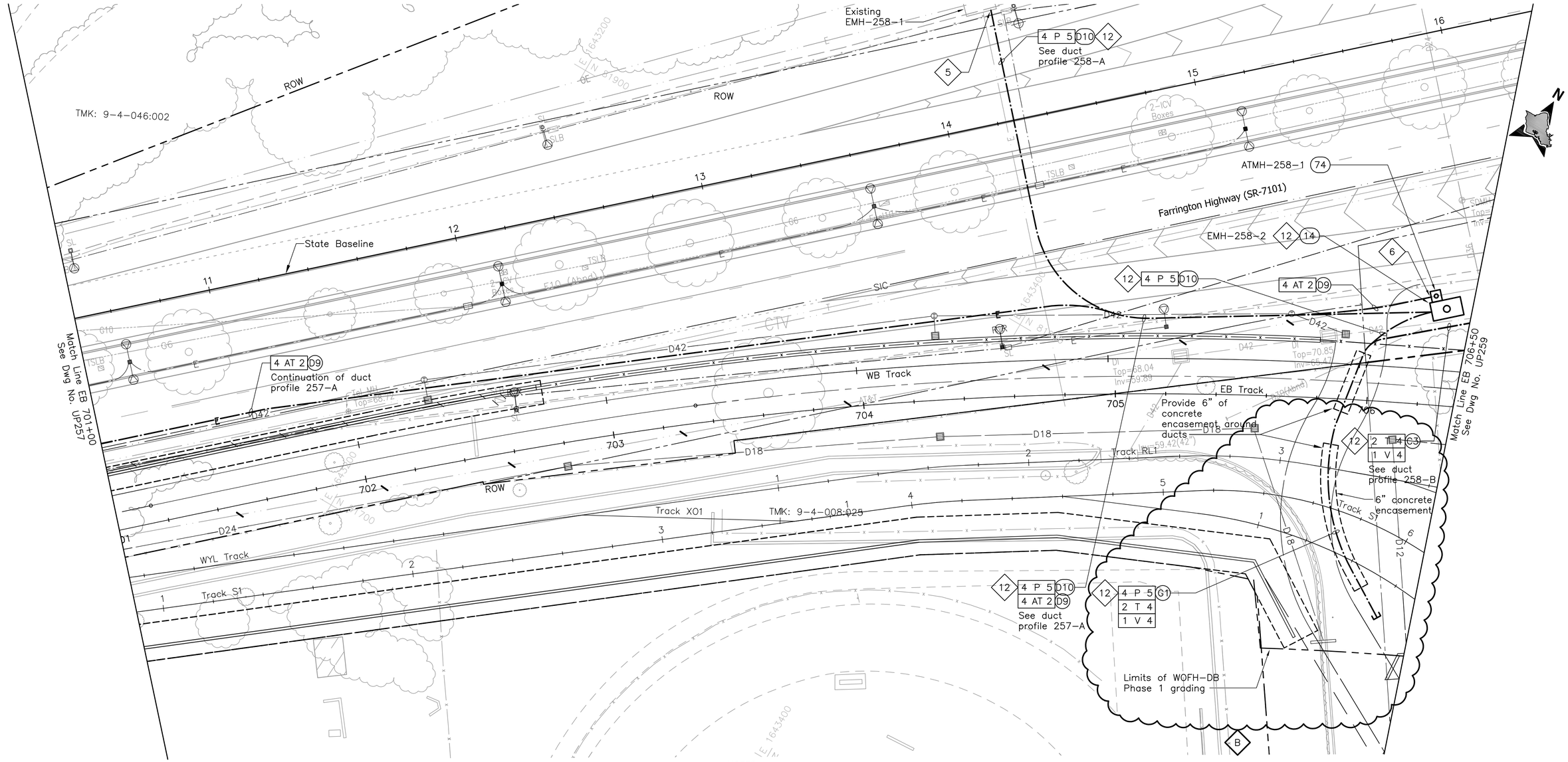

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

5 Install conduits into manhole under applicable utility company supervision. See Detail 3/UP301.

6 Intercept existing duct line with new manhole. Demolish concrete jacket and duct within manhole and expose cables. Preserve cables during demolition of duct.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

Rev	By	Date	Description
B	FKH	05–22–09	Extend Ductline to MSF; Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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For reduced prints, original page size in inches: 0 1 2 3 4

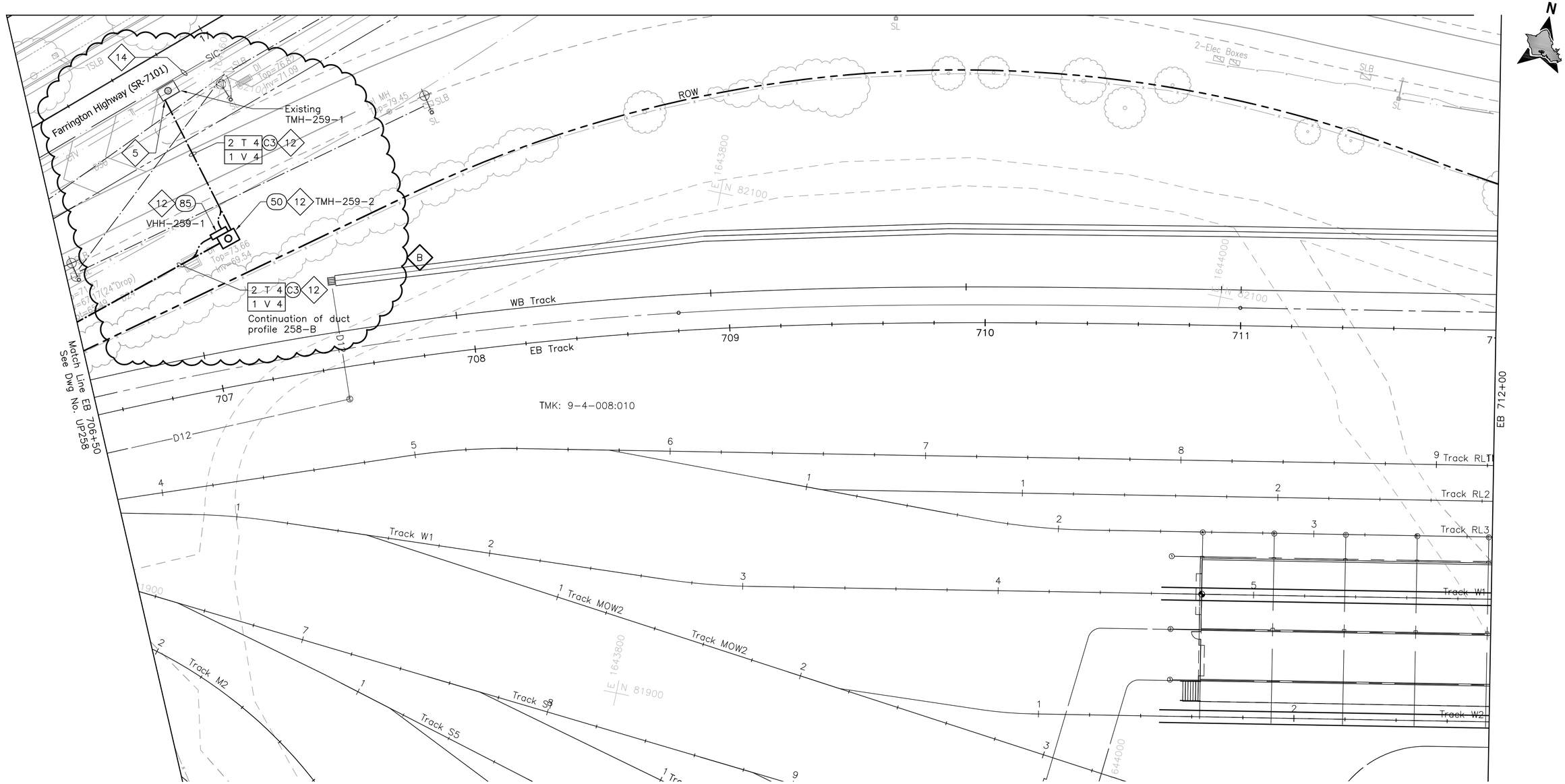
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 701+00 TO EB 706+50

Contract No.: DB–1200
CADD File: WF–D03–UP258
Drawing No.: UP258 Rev. B
Scale: 1"=20'
Page No. 232 of 314

P:\01_PROJECTS\2007\07081-HHCTCSES-8_C\dwg\WF-D03-UP25-UP257.dwg, WF-D03-UP258, 5/19/2009 4:37:02 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

14 Sandwich Isles Communications (SIC) line is a proposed communication utility project by others and shown for informational purposes only. The Design Build Contractor shall coordinate the location of the future line with SIC to avoid potential conflicts. The Design Build Contractor shall inform the City of all coordination efforts.

Rev	By	Date	Description
B	FKH	05-22-09	Added CATV Conduit
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 706+50 TO EB 712+00

Contract No.: DB-1200
CADD File: WF-D03-UP259
Drawing No: UP259 Rev. B
Scale: 1"=20'
Page No. 233 of 314

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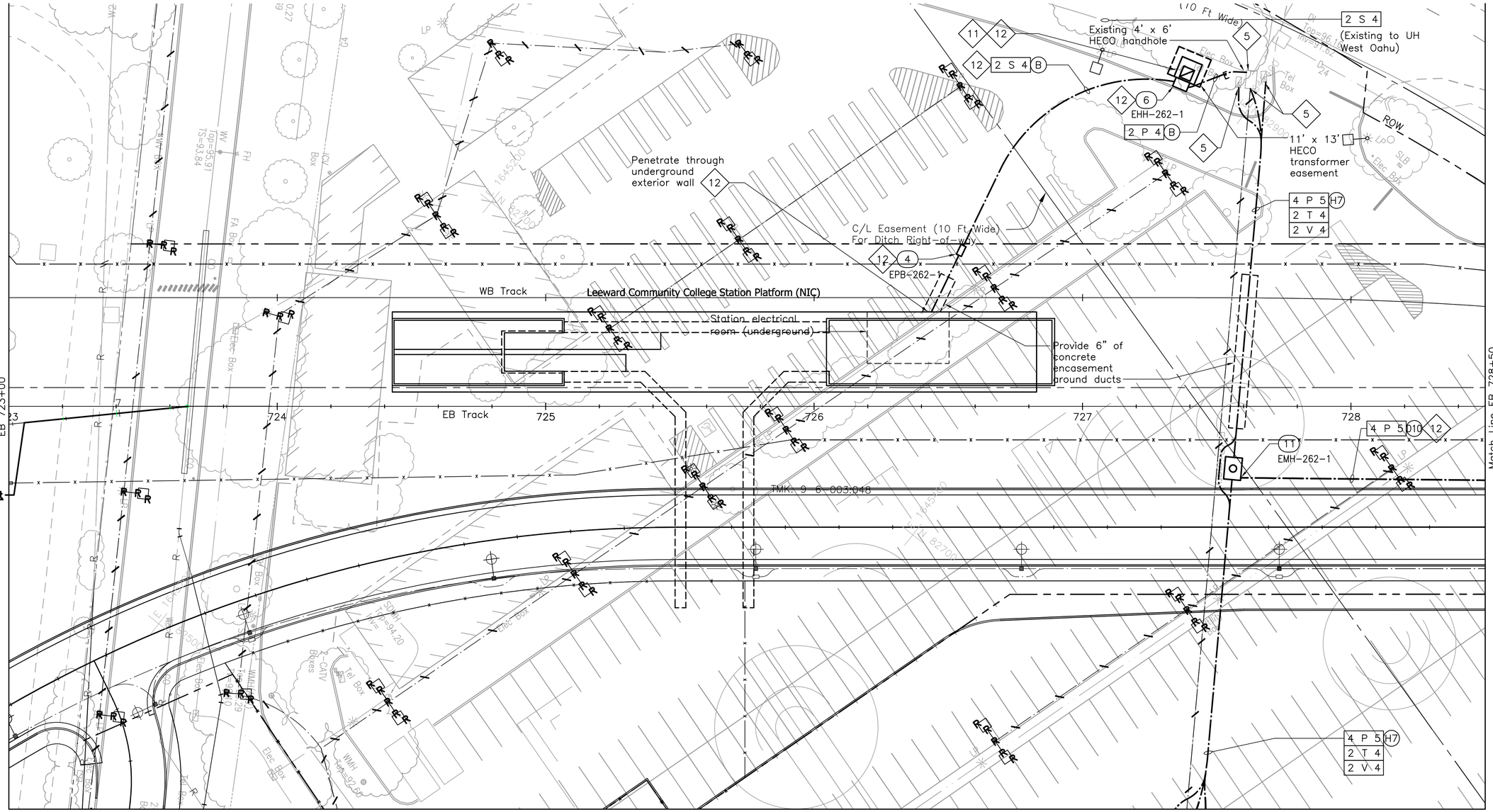

NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

11 Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

19 Replace existing handhole or pullbox with traffic rated manhole under utility company supervision. Preserve all cables and existing conduits that remain.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 723+00 TO EB 728+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP262
Drawing No.: UP262 Rev. B
Scale: 1"=20'
Page No. 234 of 314

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Match Line
See Dwg No. UP262

Match Line EB 728+50
See Dwg No. UP263A

NOTES:

19 Replace existing handhole or pullbox with traffic rated manhole under utility company supervision. Preserve all cables and existing conduits that remain.

20' 0 20'

Rev	By	Date	Description
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 723+00 TO EB 728+50 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP262A
Drawing No: UP262A
Rev. A
Scale: 1"=20'
Page No. 235 of 314

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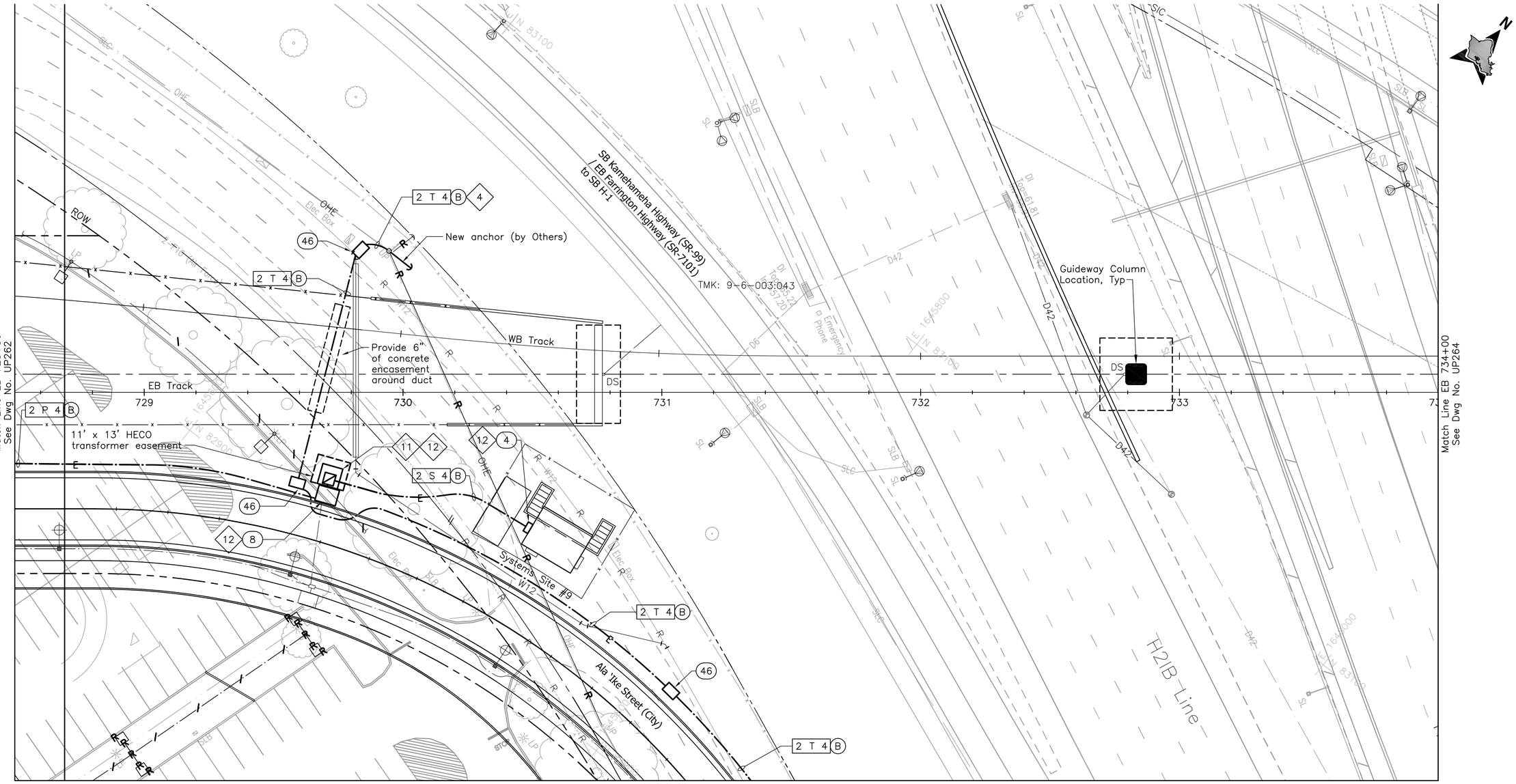

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

11 Provide transformer concrete pad (transformer by HECO). See detail 1/UP306.

12 Preliminary new HECO service design only; to be finalized by Design Build Contractor.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 728+50 TO EB 734+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D03-UP263
Drawing No.: UP263 Rev. B
Scale: 1"=20'
Page No. 236 of 314

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Match Line
See Dwg No. UP263

Match Line EB 728+50
See Dwg No. UP262A

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 728+50 TO EB 734+00 SHEET 2 OF 2

Contract No.: DB–1200
CADD File: WF–D03–UP263A
Drawing No: UP263A
Rev. B
Scale: 1"=20'
Page No. 237 of 314

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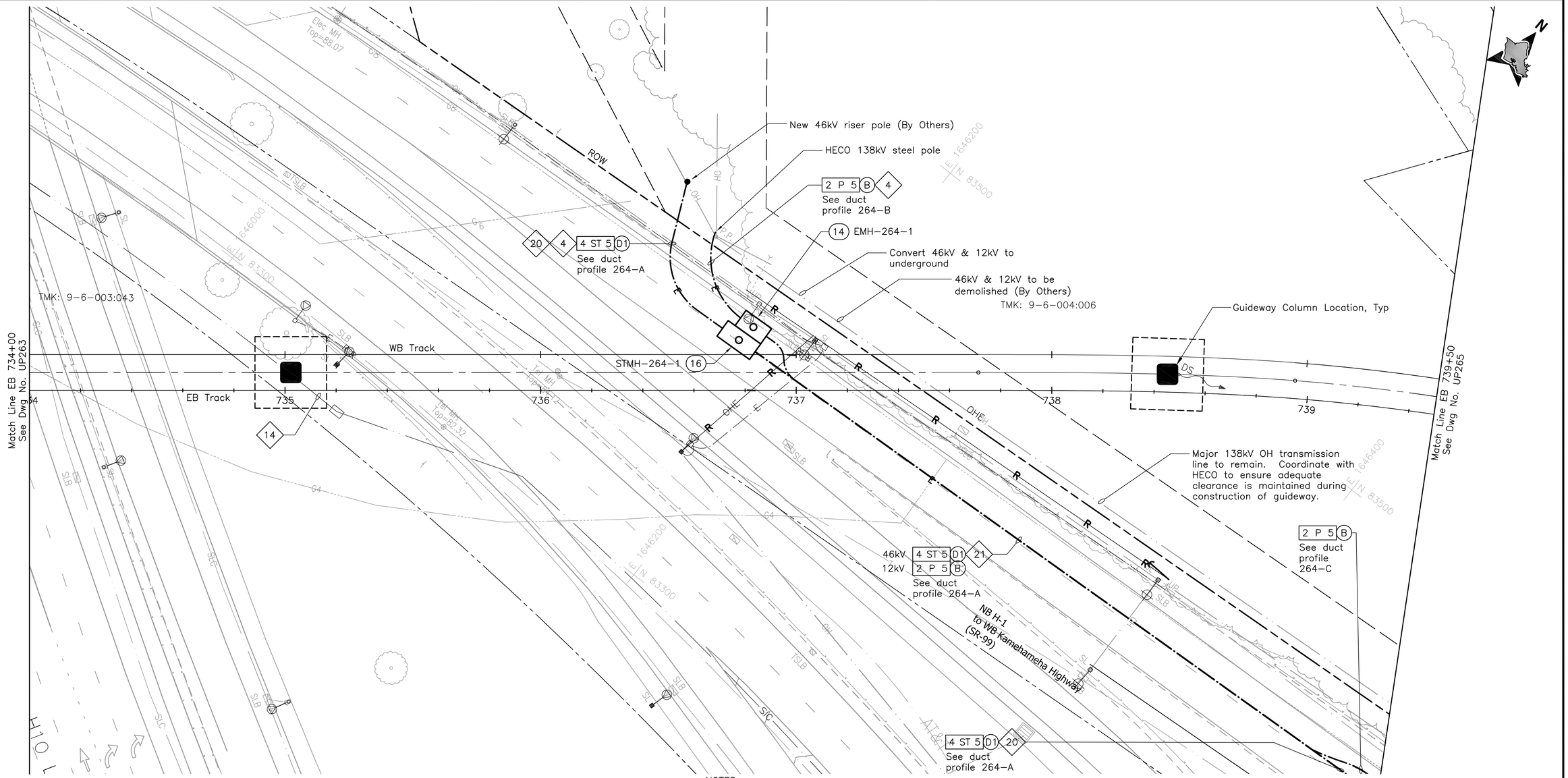

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NOTES:

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20 See detail 2/UP303.

21 See detail 3/UP303.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 734+00 TO EB 739+50

Contract No.: DB–1200
CADD File: WF–D03–UP264
Drawing No.: UP264 Rev. B
Scale: 1"=20'
Page No. 238 of 314

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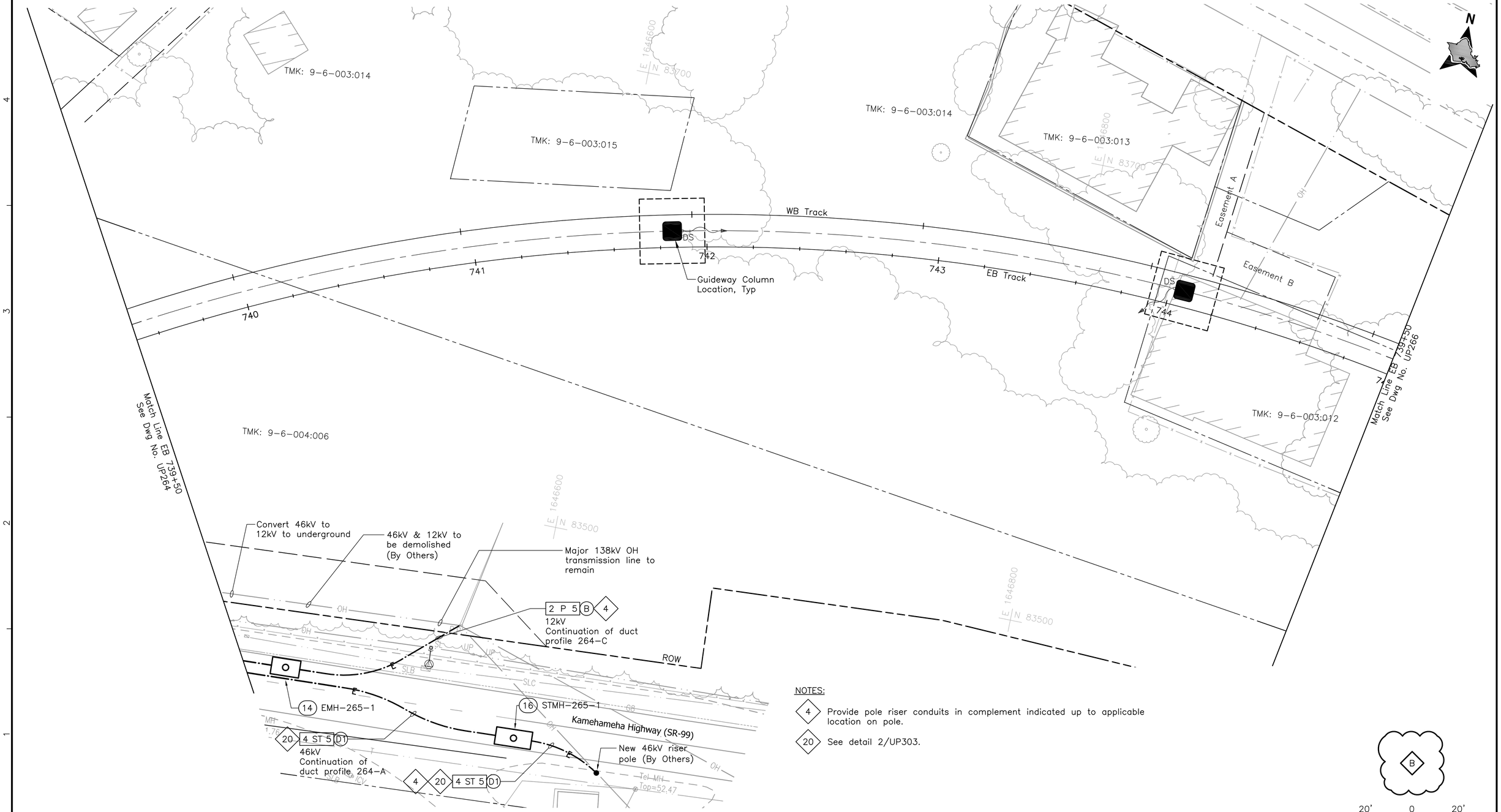

NOTES:

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

20 See detail 2/UP303.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant: MKengineers
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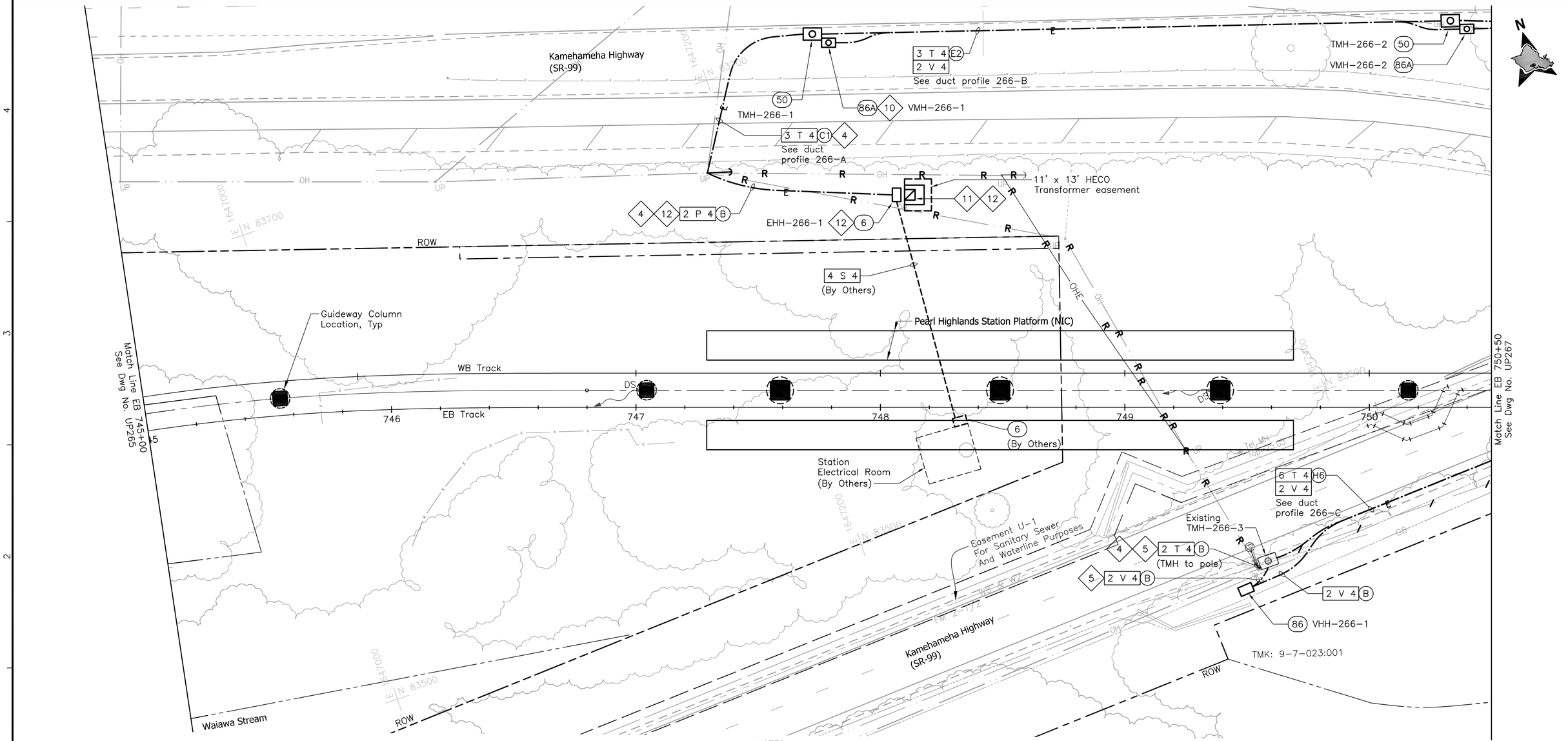
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 739+50 TO EB 745+00

Contract No.: DB-1200
CADD File: WF-D03-UP265
Drawing No.: UP265 Rev. B
Scale: 1"=20'
Page No. 241 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEIS-B_Dwg\WF-D03-UP235-UP287.dwg, WF-D03-UP265, 5/19/2009 4:41:41 PM, dwyn, 1:1



NOTES:

4. Provide pole riser conduits in complement indicated up to applicable location on pole.
5. Install conduits into manhole under applicable utility company supervision. See Detail 3/UP301.
10. Provide 1-4" sleeve between CATV handhole and HT handhole/manhole.
11. Provide transformer concrete pad (transformer by HECO). See detail 2/UP306.
12. Preliminary new HECO service design only; to be finalized by Design Build Contractor.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 745+00 TO EB 750+50

Contract No.: DB-1200
CADD File: WF-D03-UP266
Drawing No.: UP266 Rev. B
Scale: 1"=20'

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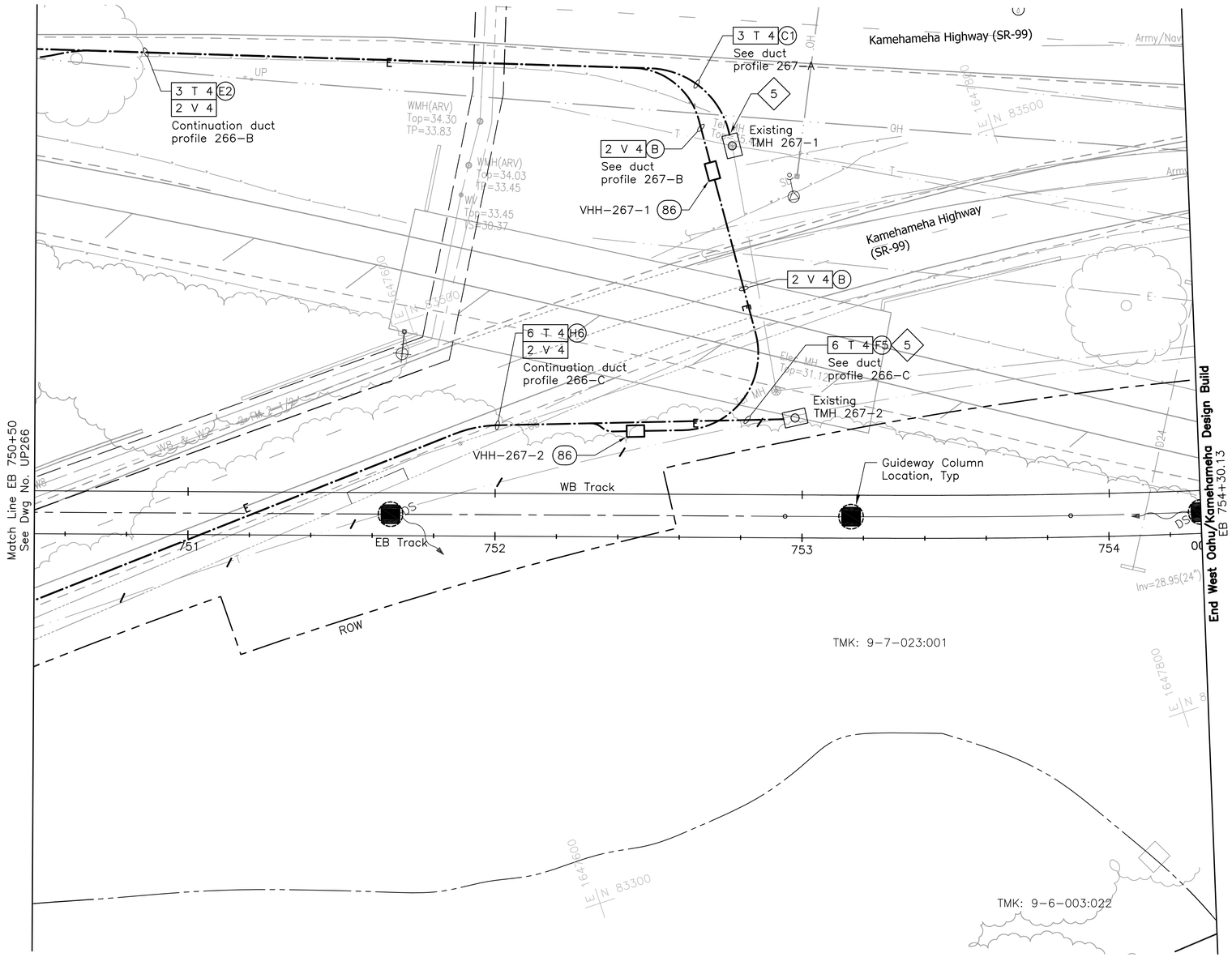

NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
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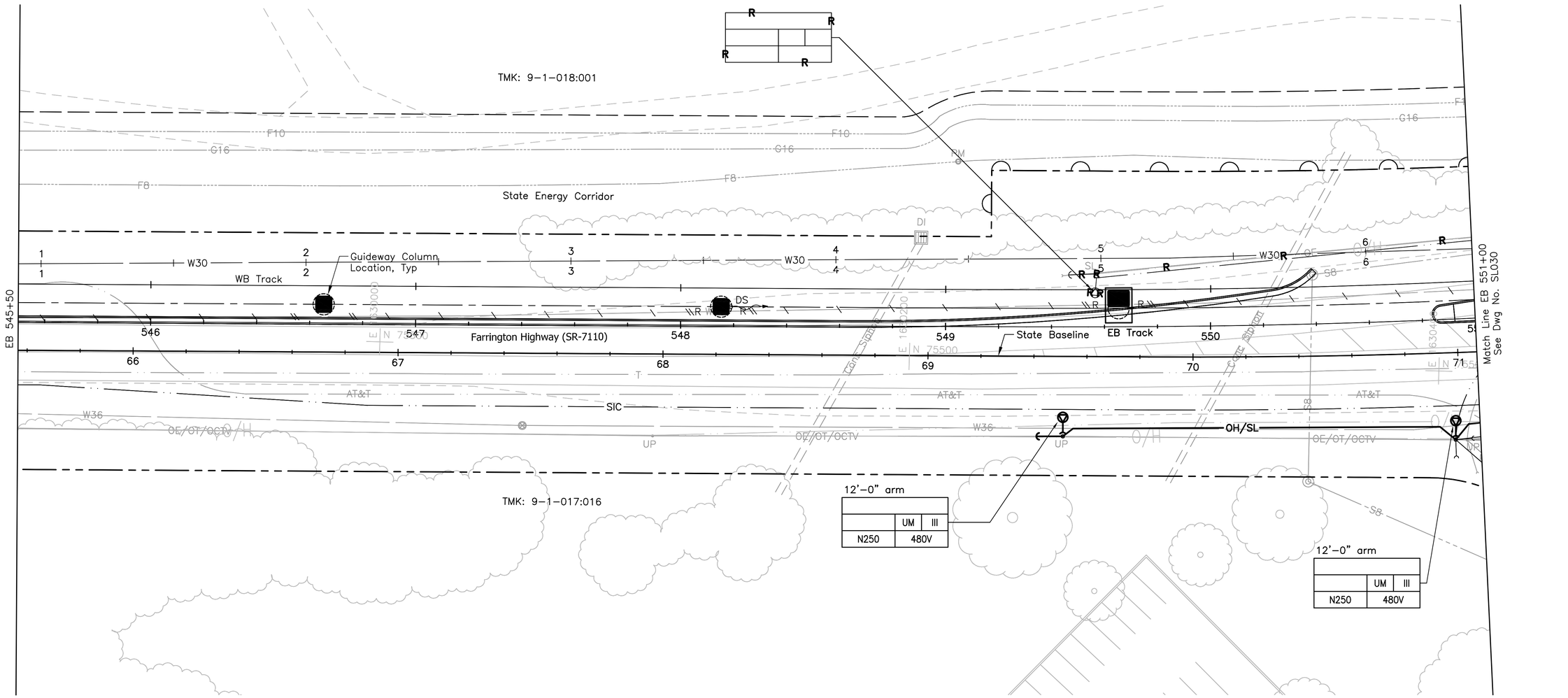
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN ELECTRICAL & COMMUNICATIONS

EB 750+50 TO EB 754+30.13

Contract No.: DB–1200
CADD File: WF–D03–UP267
Drawing No.: UP267 Rev. B
Scale: 1"=20'
Page No. 246 of 314

P:\01_PROJECTS\2007\2078\81-HHCTCSE\E-B_Cvlwg\WF-D03-UP235-UP267.dwg, WF-D03-UP267, 5/19/2009 4:42:54 PM, dwyn, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

Rev	By	Date	Description
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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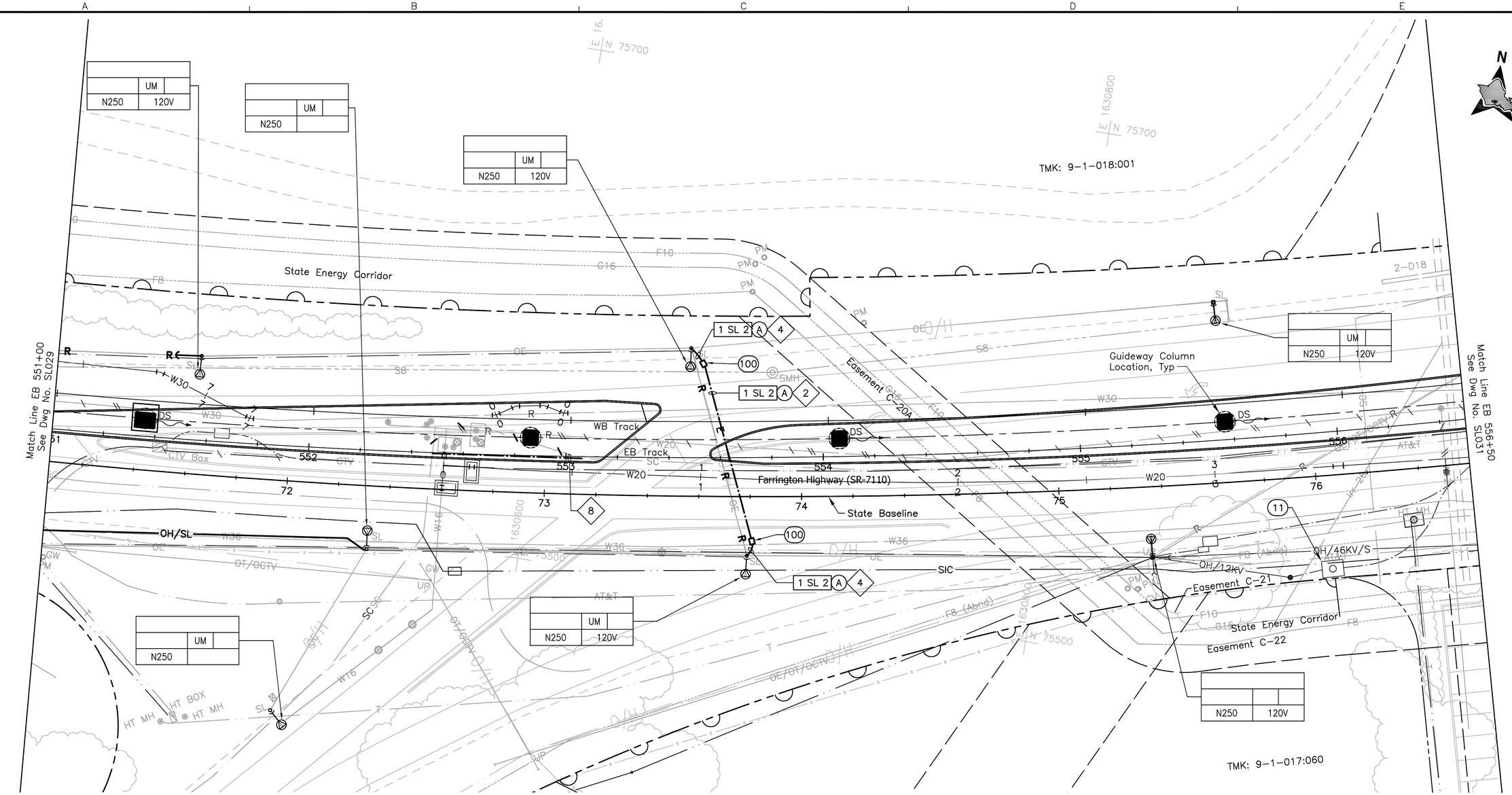
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 545+50 TO EB 551+00

Contract No.: DB-1200
CADD File: WF-D04-SL029
Drawing No.: SL029 Rev. A
Scale: 1"=20'
Page No. 266 of 314

G:\PROJECTS\2007\07081-HHCTC\SEC4B_Cmp\WF-D04-SL001-SL034.dwg, WF-D04-SL029, 5/19/2009 3:27:27 PM, Fay, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

8 Re-route conduits and cables around guideway column.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	FKH	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 551+00 TO EB 556+50

Contract No.: DB-1200
CADD File: WF-D04-SL030
Drawing No.: SL030 Rev.: B
Scale: 1"=20'

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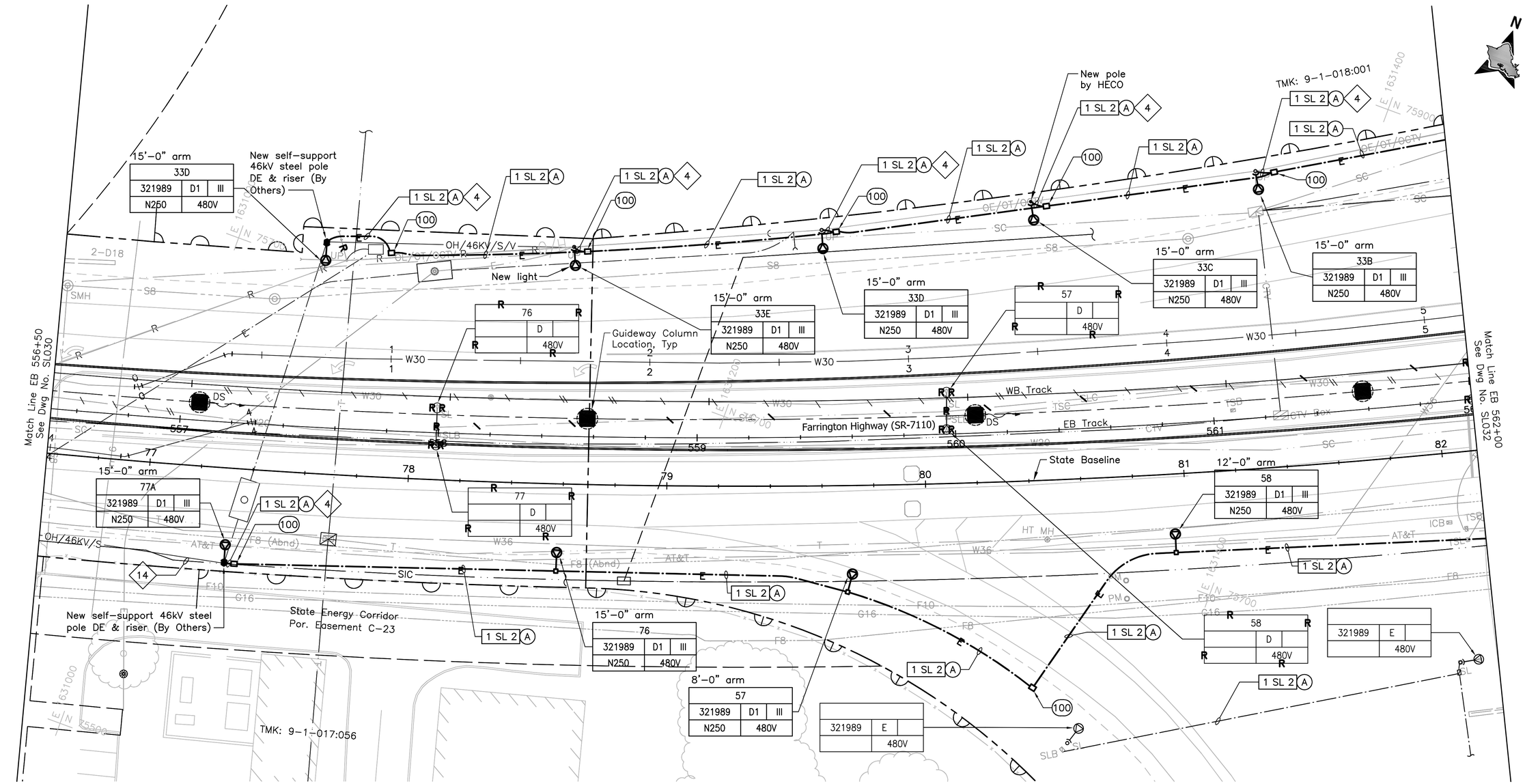
15'–0" arm
33D
321989 D1 III
N250 480V
New self–support 46kV steel pole DE & riser (By Others)
1 SL 2 A 4
100
OH/46KV/S/V
2–D18
SMH
New light
Guideway Column Location, Typ
15'–0" arm
33E
321989 D1 III
N250 480V
15'–0" arm
33D
321989 D1 III
N250 480V
New pole by HECO
TMK: 9–1–018:001
15'–0" arm
33C
321989 D1 III
N250 480V
15'–0" arm
33B
321989 D1 III
N250 480V
76
D
480V
57
D
480V
W30
WB Track
EB Track
Farrington Highway (SR-7110)
State Baseline
Match Line EB 556+50 See Dwg No. SL030
Match Line EB 562+00 See Dwg No. SL032
15'–0" arm
77A
321989 D1 III
N250 480V
77
D
480V
12'–0" arm
58
321989 D1 III
N250 480V
OH/46KV/S
AT&T
F8 (Abnd)
SIC
New self–support 46kV steel pole DE & riser (By Others)
State Energy Corridor Por. Easement C–23
TMK: 9–1–017:056
15'–0" arm
76
321989 D1 III
N250 480V
8'–0" arm
57
321989 D1 III
N250 480V
321989 E
480V
58
D
480V
321989 E
480V
HT MH
PM
ICB
CTV
SLB
SL
TSB
SC
OE/OT/OCTV
E/N 75900
E/N 75500
E/N 76250
E/N 76600
E/N 76950
E/N 77300
E/N 77650
E/N 78000
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E/N 79750
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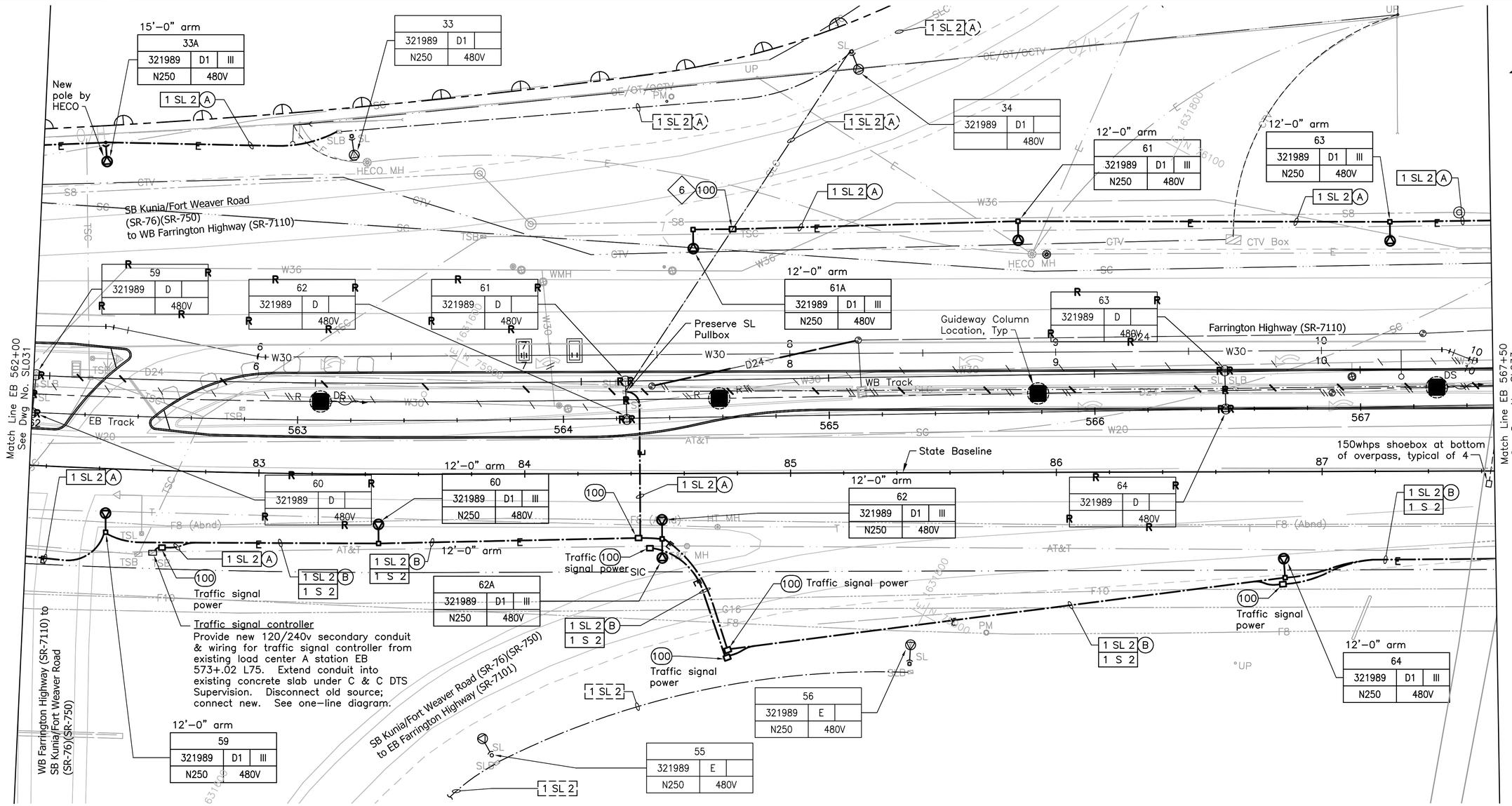

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

6 Intercept existing duct line with new manhole, handhole, or pullbox as indicated. Demolish concrete jacket and duct within manhole, handhole, or pullbox as indicated and expose cables. Preserve cables during demolition of duct.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB 1822 PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 562+00 TO EB 567+50

Contract No.: DB–1200
CADD File: WF–D04–SL032
Drawing No.: SL032 Rev.: B
Scale: 1"=20'
Page No.: 269 of 314

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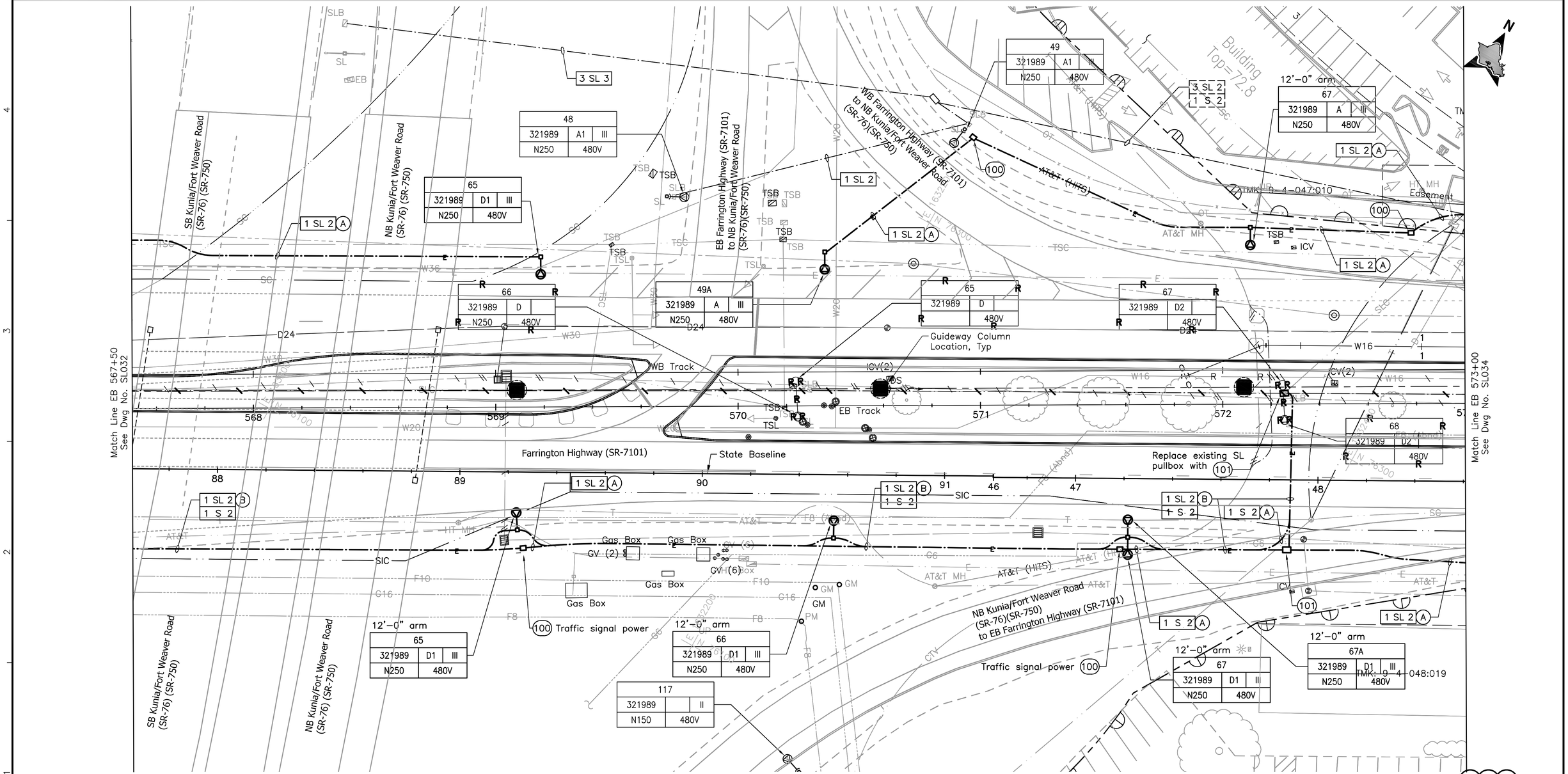

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 567+50 TO EB 573+00

Contract No.: DB–1200
CADD File: WF–D04–SL033
Drawing No: SL033 Rev. B
Scale: 1"=20'
Page No. 270 of 314

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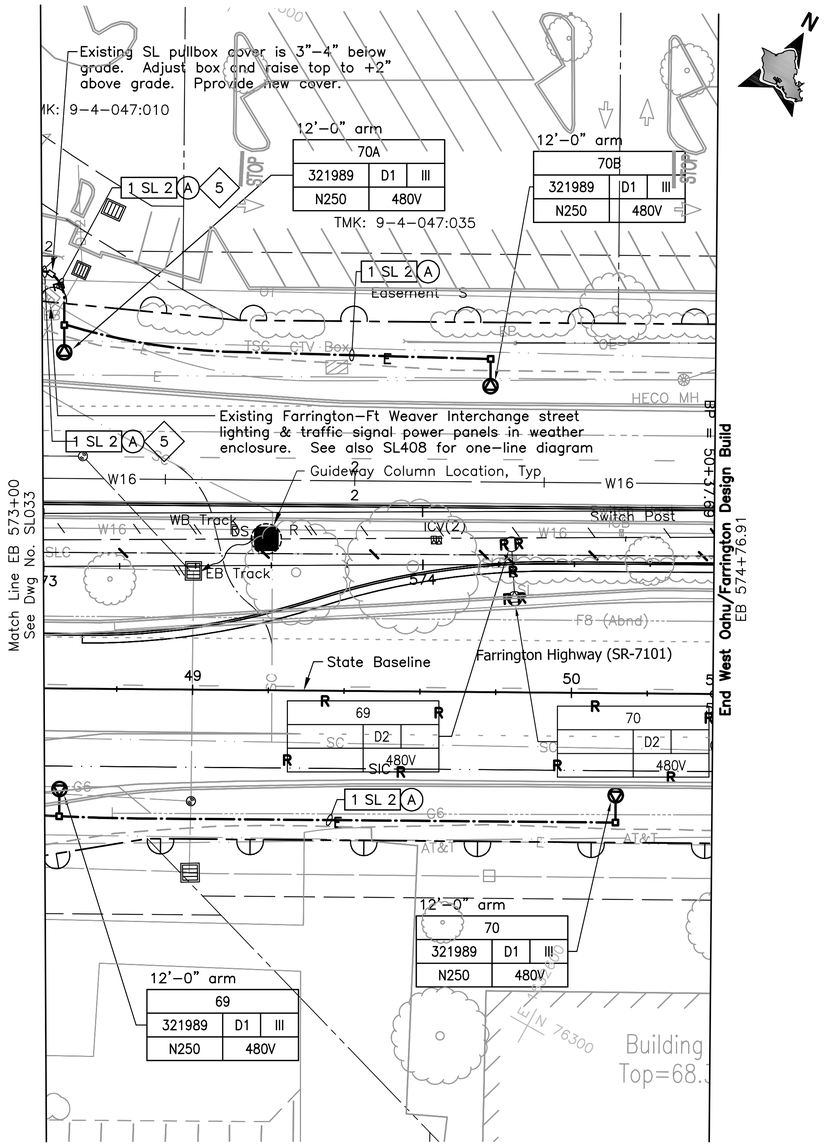

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05–22–09	Update Drawing
A	FKH	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 573+00 TO EB 574+76.91

Contract No.: DB–1200
CADD File: WF–D04–SL034
Drawing No.: SL034 Rev.: B
Scale: 1"=20'
Page No.: 271 of 314

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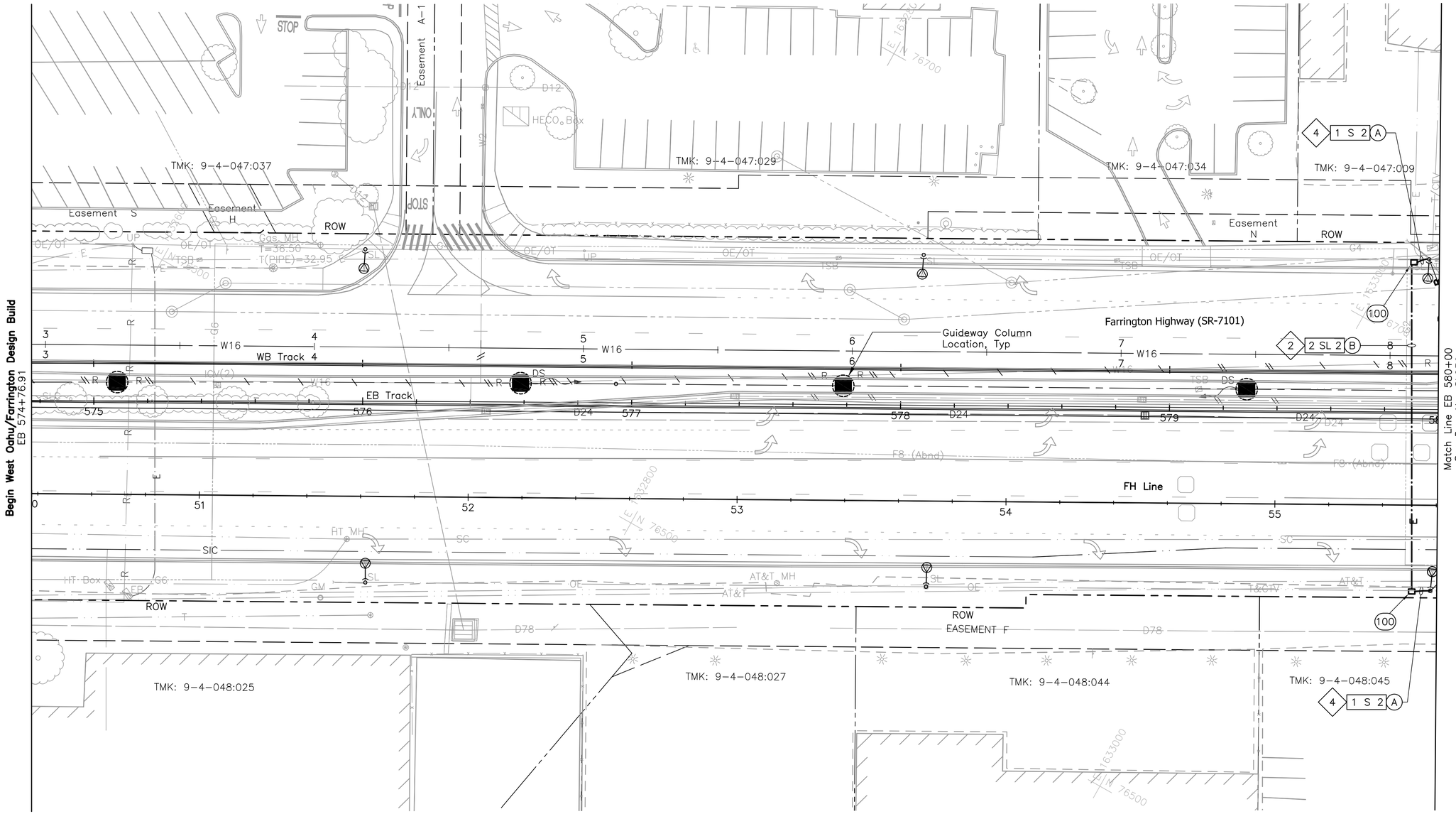

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, pullboxes, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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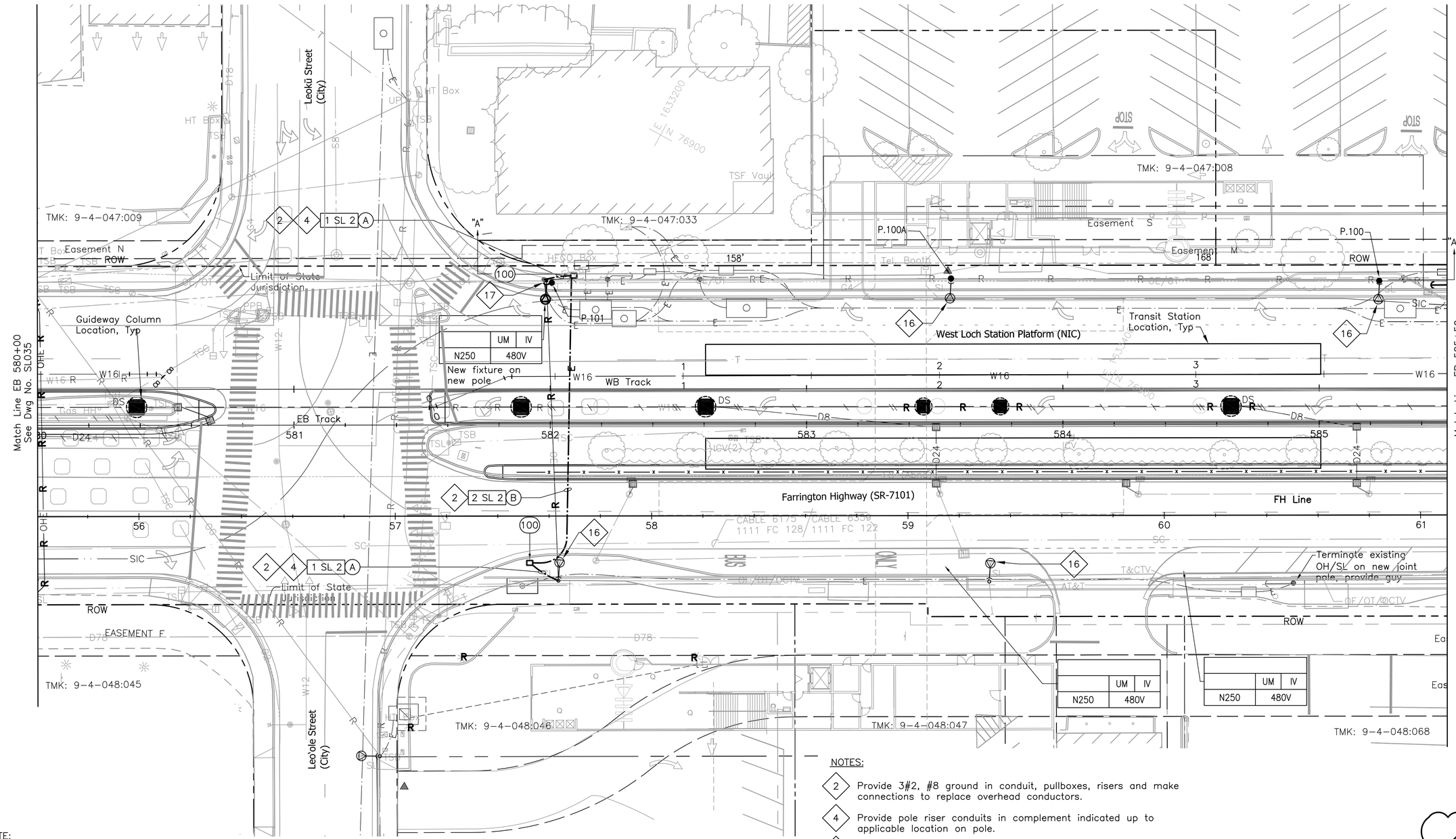
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 574+76.91 TO EB 580+00

Contract No.: DB-1200
CADD File: WF-D04-SL035
Drawing No.: SL035
Rev.: B
Scale: 1"=20'
Page No.: 272 of 314

P:\01_PROJECTS\2007\07081-HHCTC\SEC\B_Cdwg\WF-D04-SL035-SL087.dwg, WF-D04-SL035, 5/19/2009 3:42:07 PM, Fay, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, pullboxes, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

16 HECO to top pole above street light conductor contact point after 46kV & 12kV conductors are removed. Retain street light conductors on pole.

17 Attach existing street light conductors to new pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
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Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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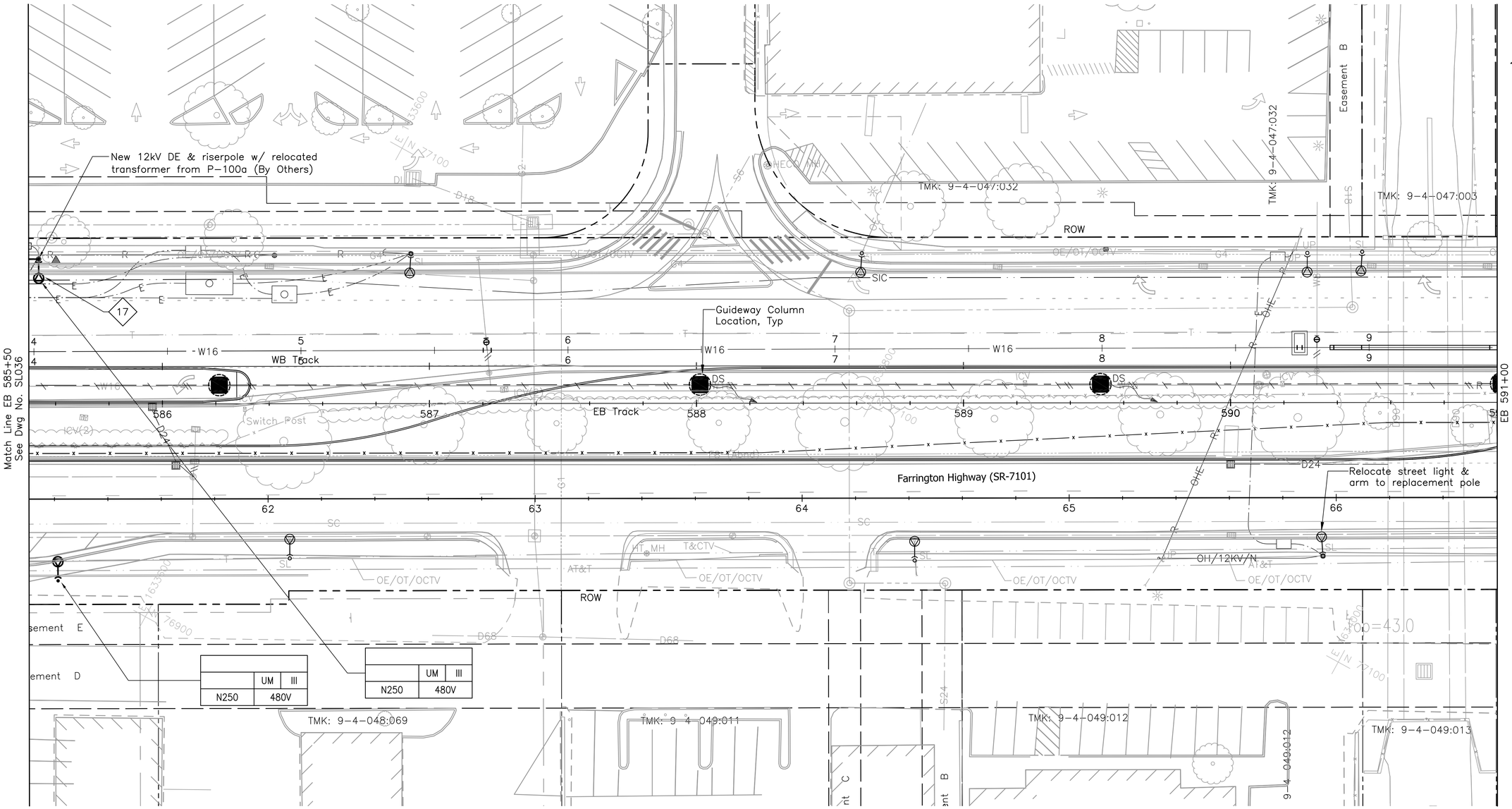
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 580+00 TO EB 585+50

Contract No.: DB-1200
CADD File: WF-D04-SL036
Drawing No: SL036 Rev. B
Scale: 1"=20'
Page No. 273 of 314

P:\01_PROJECTS\2007\2079\81-HHCTC\SE\B_Cvwg\WF-D04-SL035-SL037.dwg, WF-D04-SL036, 5/19/2009 3:43:03 PM, Fay, 1:1



NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 585+50 TO EB 591+00

Contract No.: DB-1200
CADD File: WF-D04-SL037
Drawing No: SL037 Rev. A
Scale: 1"=20'
Page No. 274 of 314

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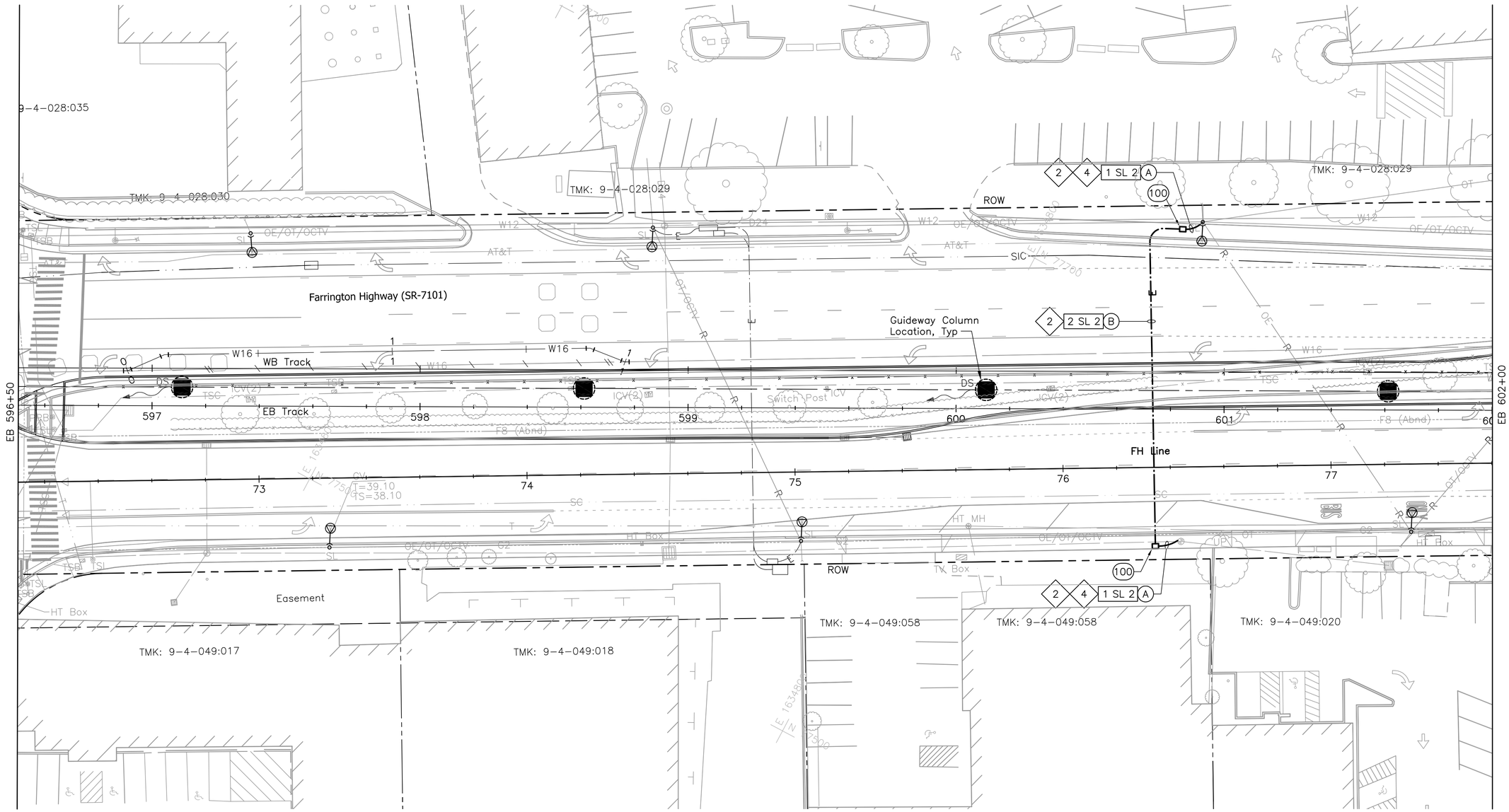

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
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Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 596+50 TO EB 602+00

Contract No.: DB-1200
CADD File: WF-D04-SL039
Drawing No: SL039 Rev. B
Scale: 1"=20'
Page No. 275 of 314

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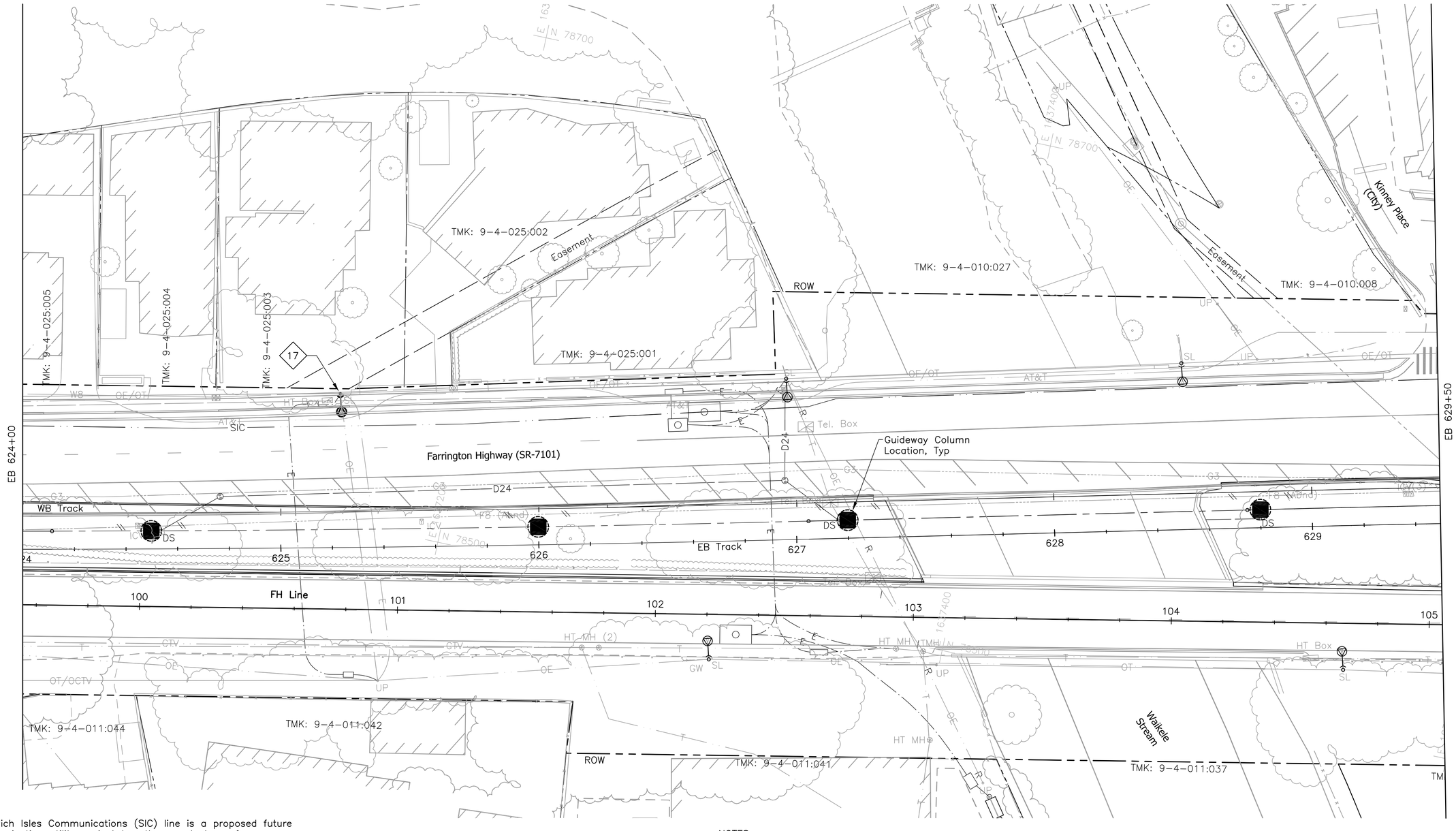

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

Rev	By	Date	Description
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 624+00 TO EB 629+50

Contract No.: DB–1200
CADD File: WF–D04–SL044
Drawing No.: SL044 Rev. A
Scale: 1"=20'
Page No. 276 of 314

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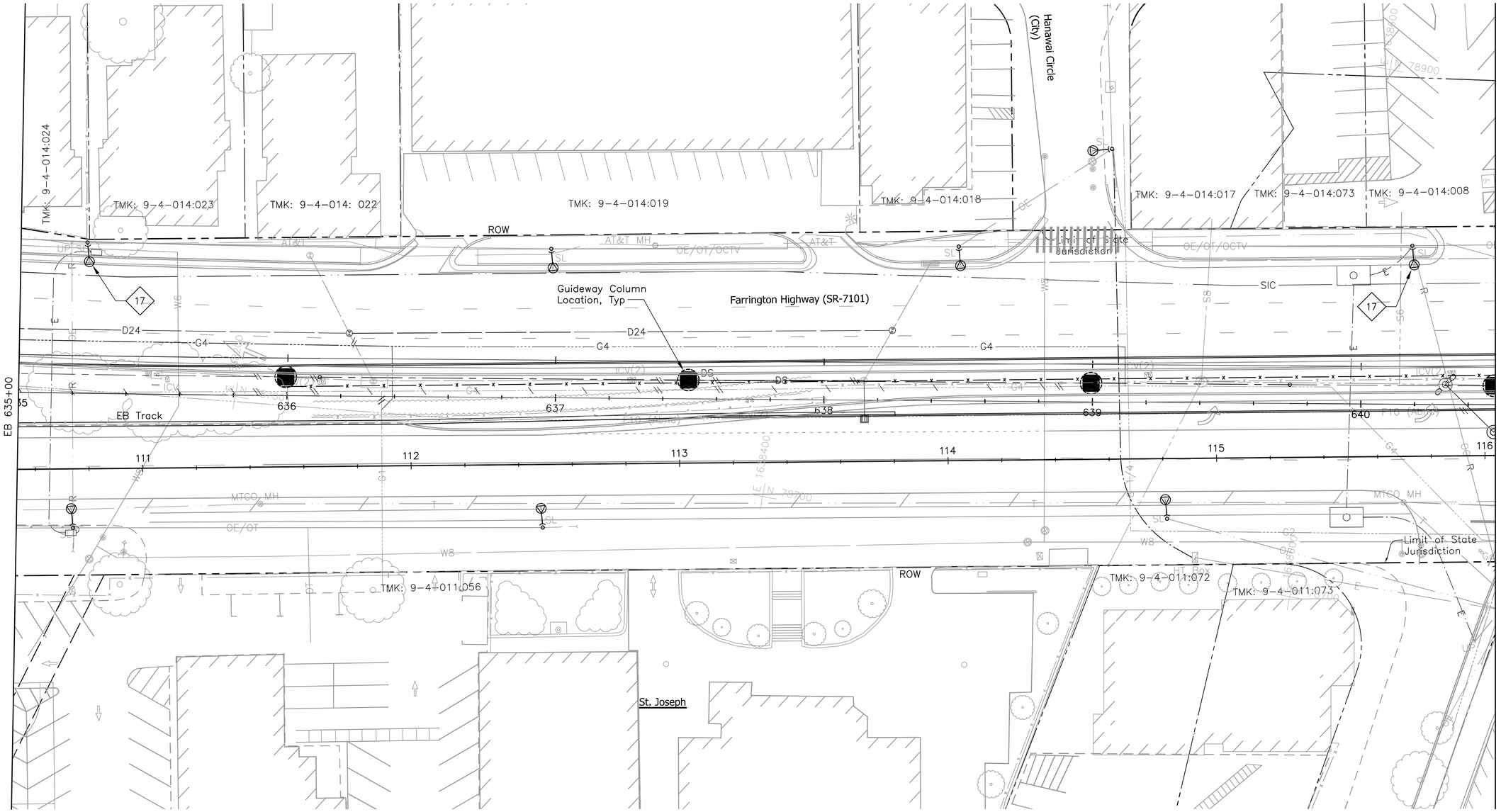

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant:
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 635+00 TO EB 640+50

Contract No.: DB-1200
CADD File: WF-D04-SL046
Drawing No: SL046 Rev. A
Scale: 1"=20'
Page No. 277 of 314

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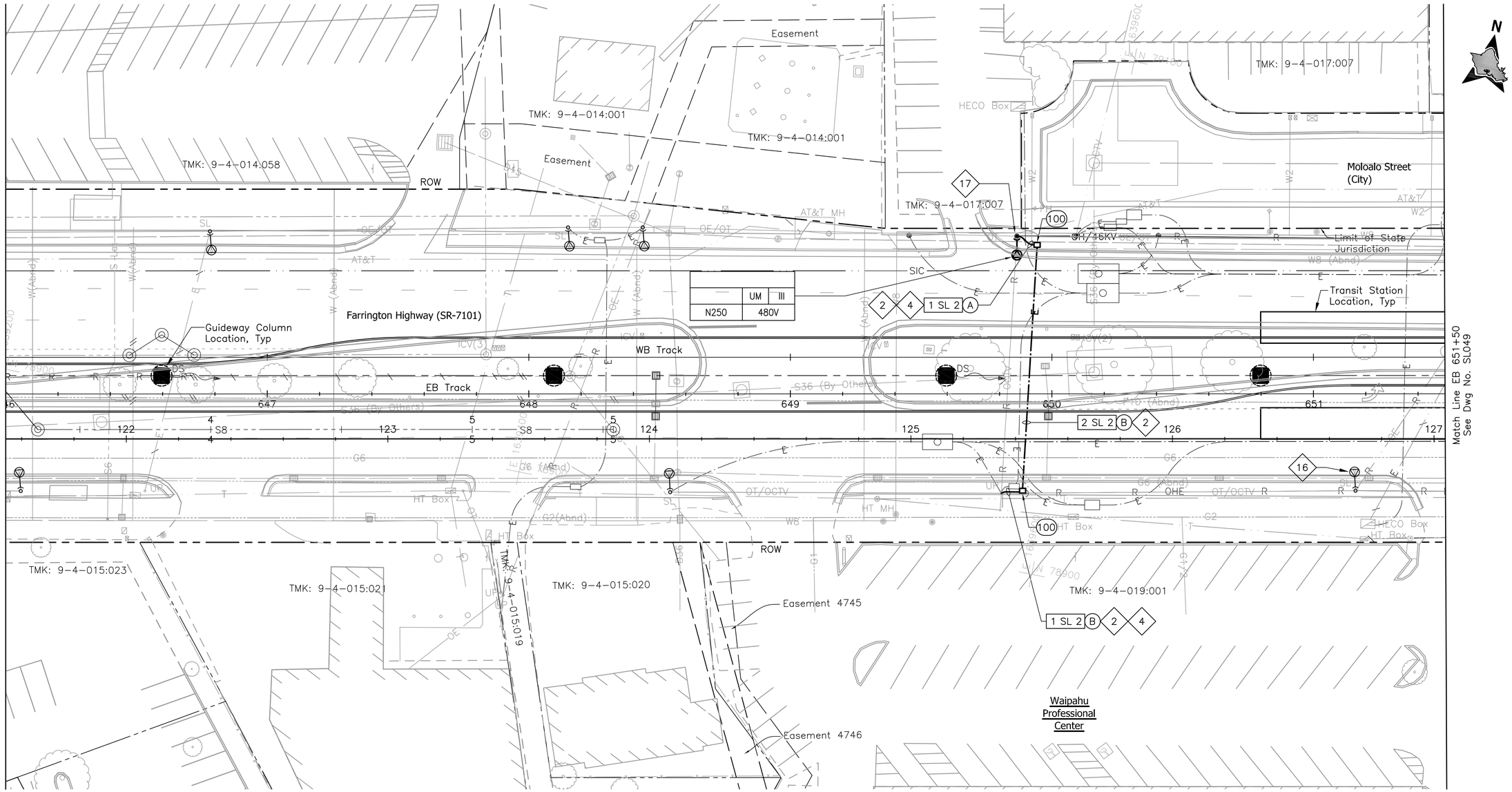

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, pullboxes, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

16 HECO to top pole above street light conductor contact point after 46kV & 12kV conductors are removed. Retain street light conductors on pole.

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

B

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 646+00 TO EB 651+50

Contract No.: DB-1200
CADD File: WF-D04-SL048
Drawing No.: SL048 Rev.: B
Scale: 1"=20'
Page No.: 278 of 314

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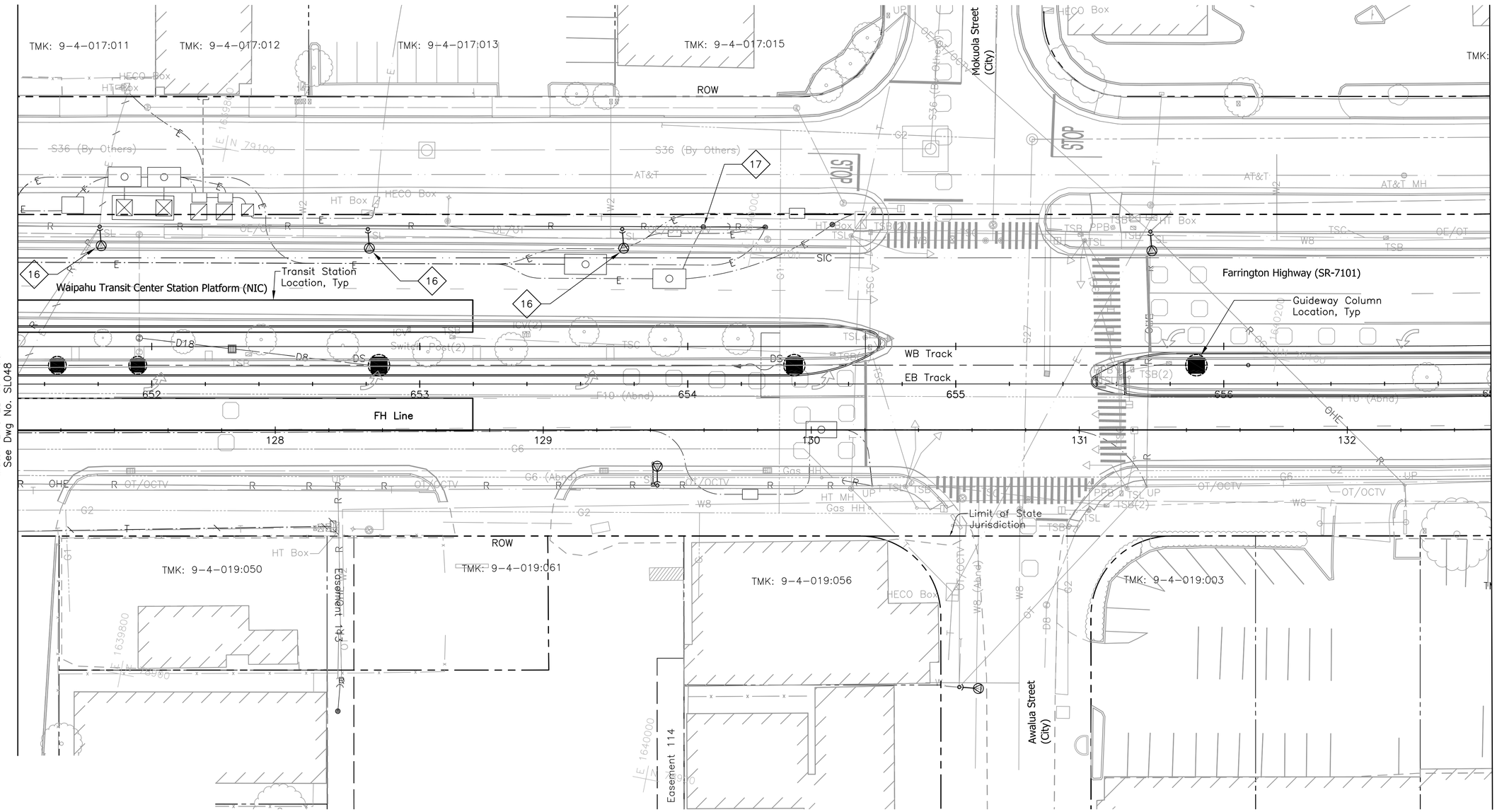

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

16 HECO to top pole above street light conductor contact point after 46kV & 12kV conductors are removed. Retain street light conductors on pole.

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 651+50 TO EB 657+00

Contract No.: DB-1200
CADD File: WF-D04-SL049
Drawing No: SL049 Rev. A
Scale: 1"=20'
Page No. 279 of 314

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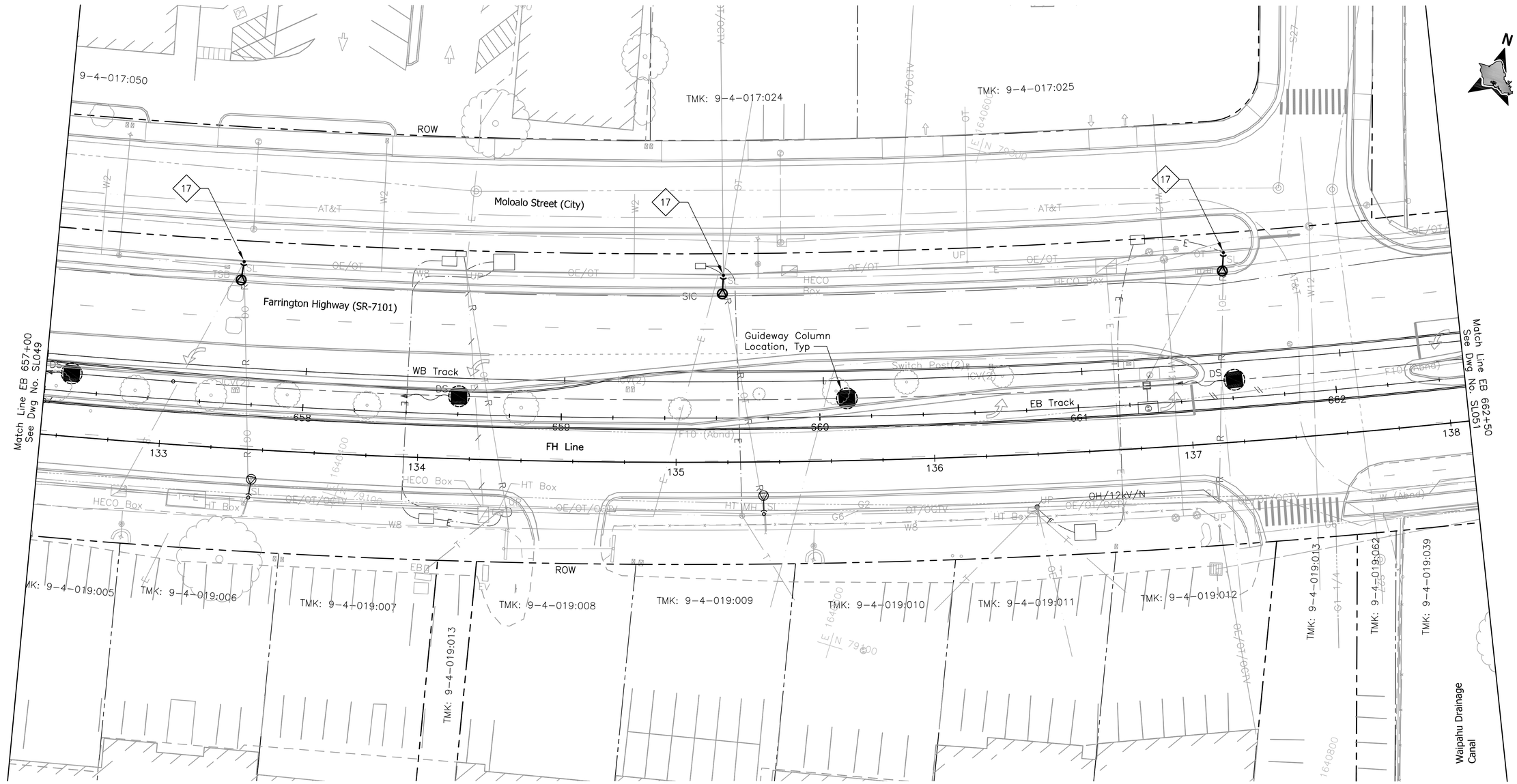

NOTE:

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NOTES:

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 657+00 TO EB 662+50

Contract No.: DB-1200
CADD File: WF-D04-SL050
Drawing No.: SL050 Rev. A
Scale: 1"=20'
Page No. 280 of 314

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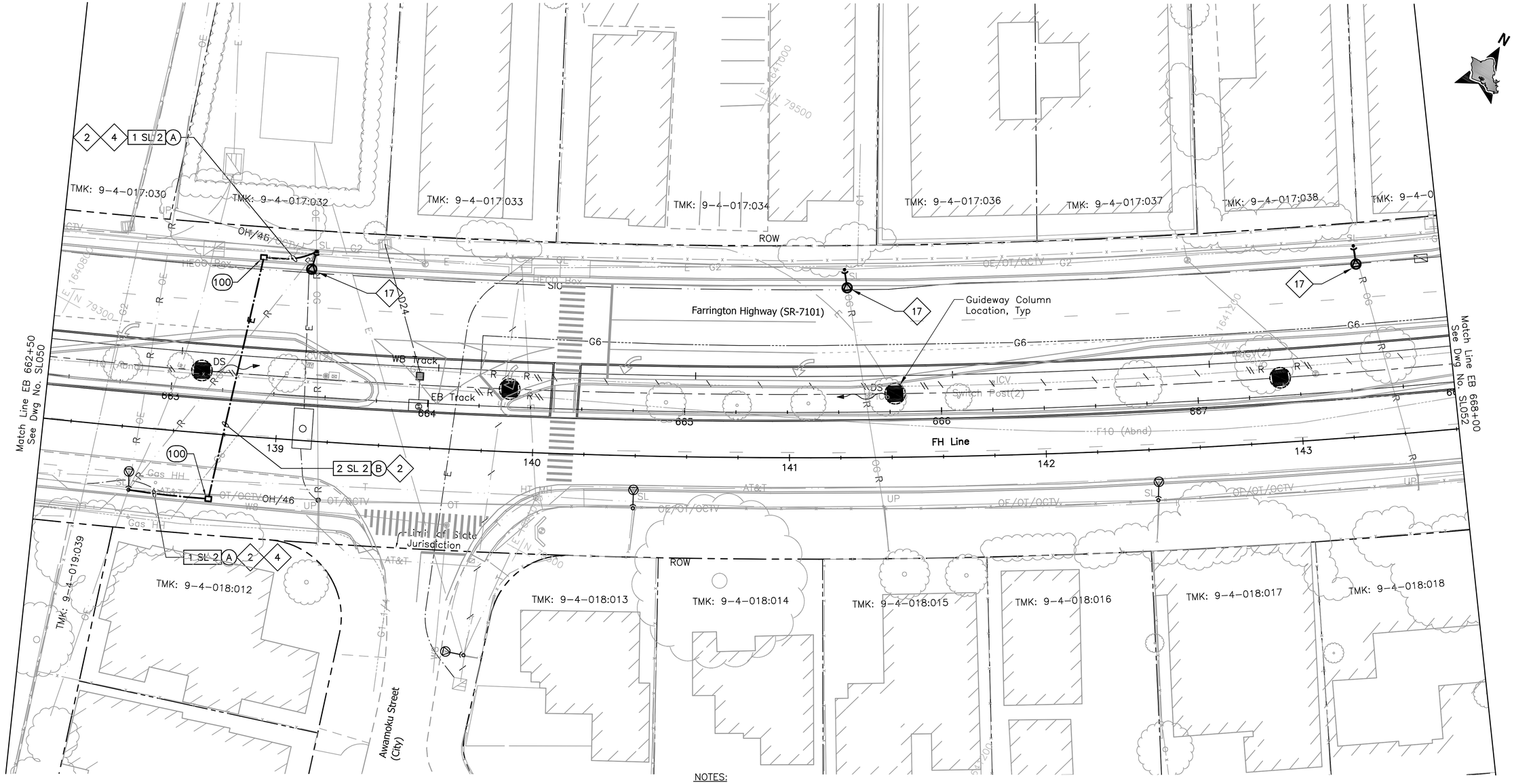

NOTE:

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NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 662+50 TO EB 668+00

Contract No.: DB-1200
CADD File: WF-D04-SL051
Drawing No: SL051 Rev. B
Scale: 1"=20'
Page No. 281 of 314

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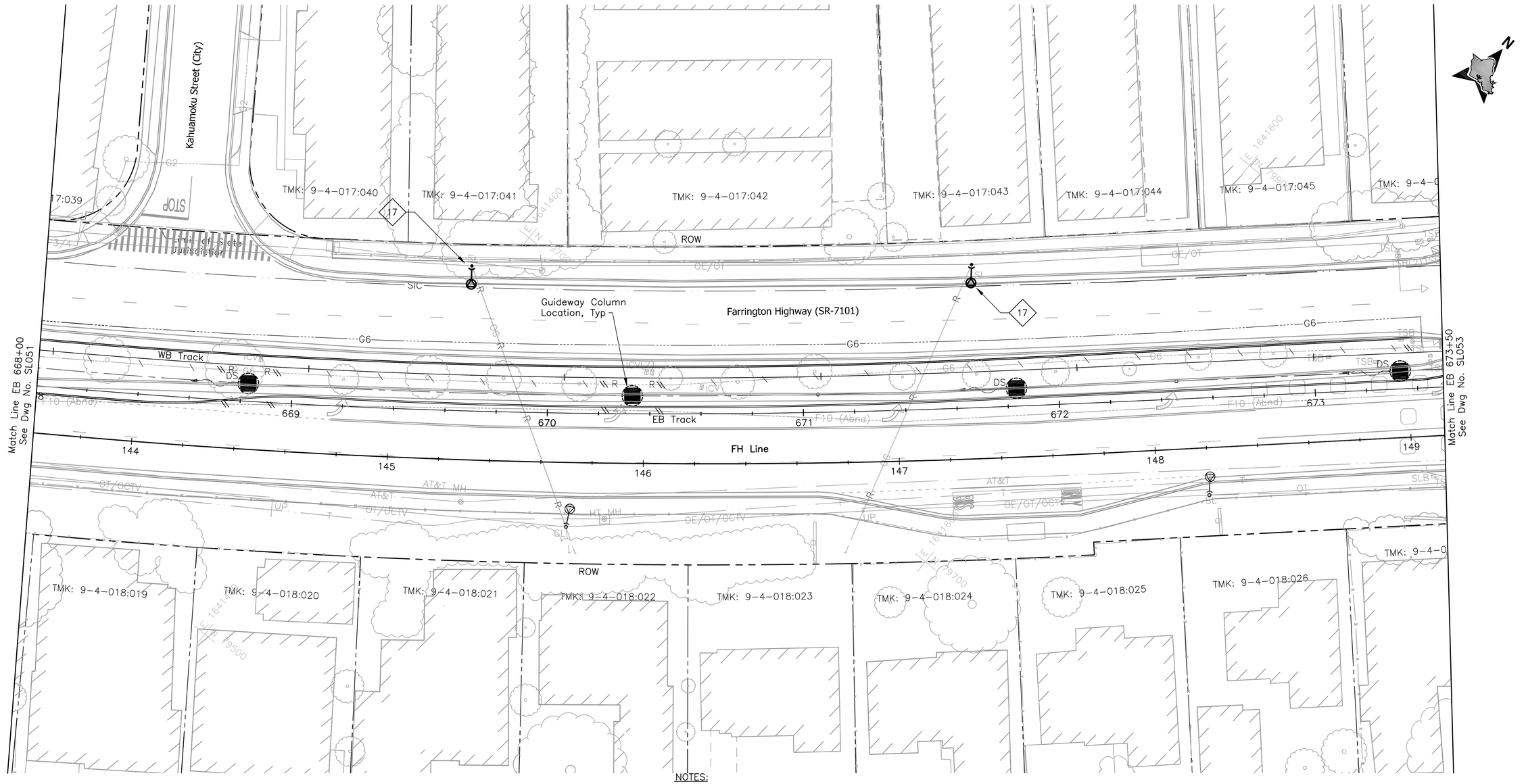

NOTE:

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NOTES:

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant: MKengineers
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 668+00 TO EB 673+50

Contract No.: DB-1200
CADD File: WF-D04-SL052
Drawing No.: SL052 Rev. A
Scale: 1"=20'
Page No. 282 of 314

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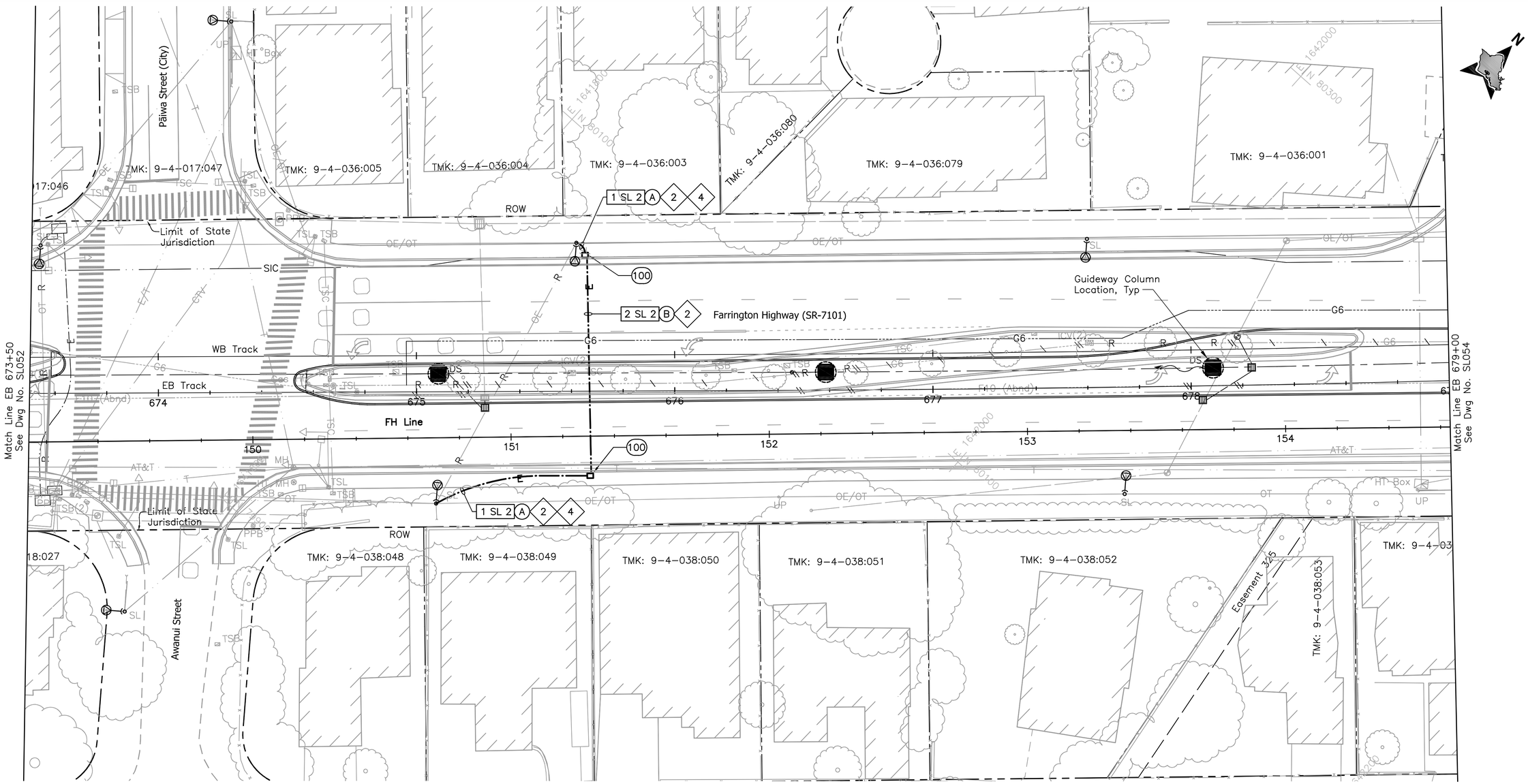

NOTE:

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NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 673+50 TO EB 679+00

Contract No.: DB-1200
CADD File: WF-D04-SL053
Drawing No.: SL053 Rev. B
Scale: 1"=20'
Page No. 283 of 314

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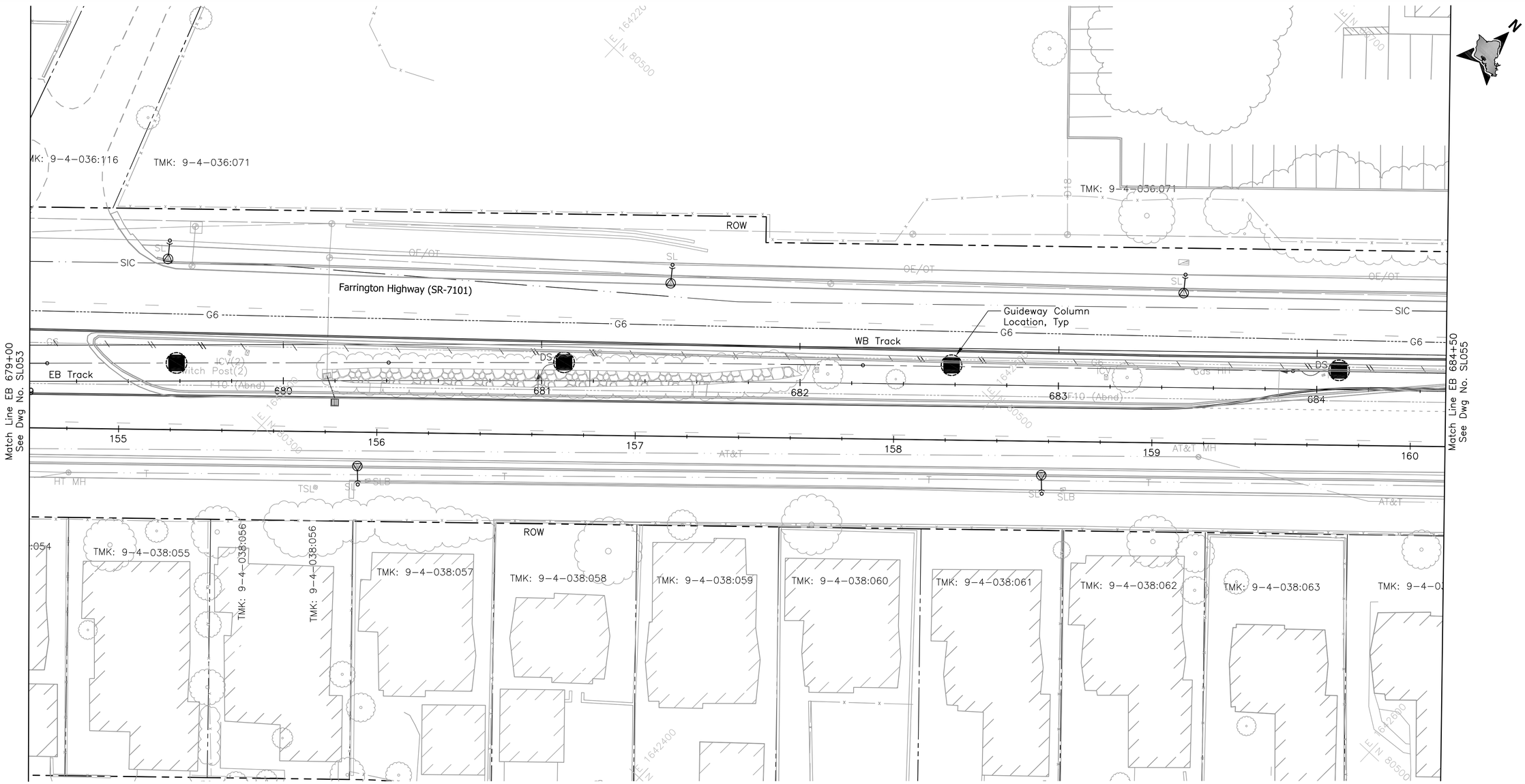

NOTE:

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20' 0 20'

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 679+00 TO EB 684+50

Contract No.: DB-1200
CADD File: WF-D04-SL054
Drawing No: SL054 Rev. A
Scale: 1"=20'
Page No. 284 of 314

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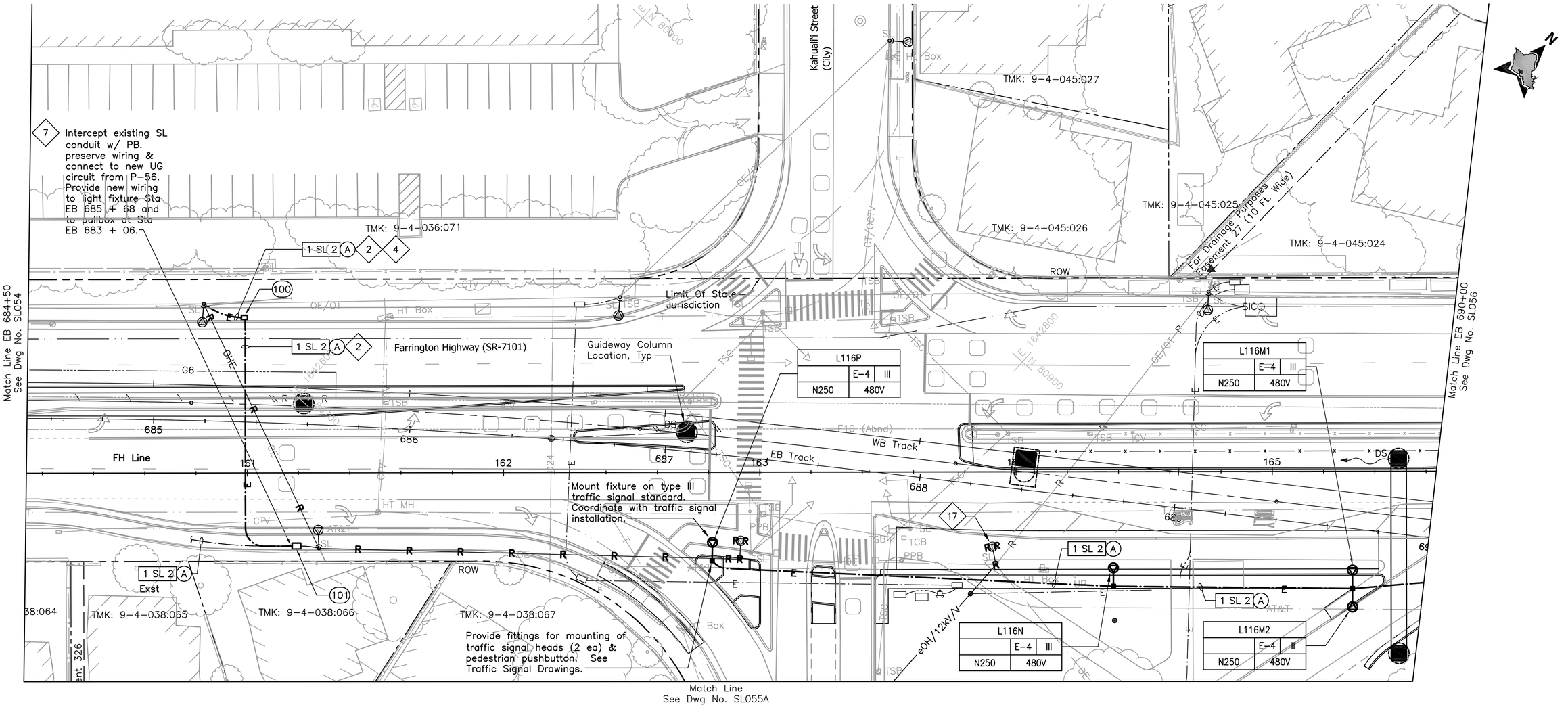

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

4 Provide pole riser conduits in complement indicated up to applicable location on pole.

7 Intercept existing duct line with pullbox or handhole as indicated. Provide new duct line and wiring to clear new work. Make all electrical connections.

17 Attach existing street light conductors to new pole. Relocate existing light fixture from old pole to new pole unless a new fixture is indicated. Provide new bracket arm with length to match existing. Reconnect fixture; see detail A/SL415.

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB 1822 PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
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For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 684+50 TO EB 690+00 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D04-SL055
Drawing No: SL055 Rev. B
Scale: 1"=20'
Page No. 285 of 314

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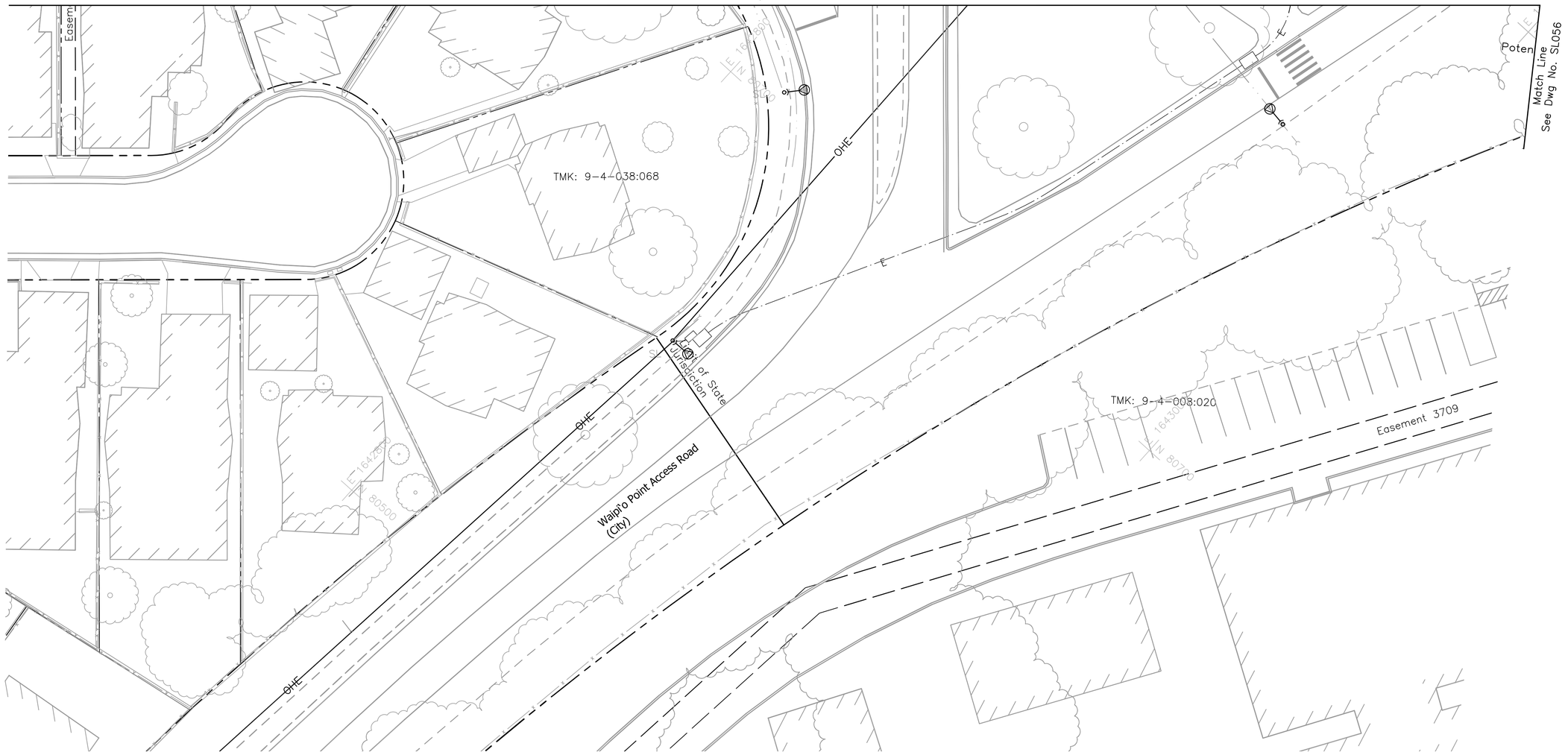

Rev	By	Date	Description
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 684+50 TO EB 690+00 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D04-SL055A
Drawing No.: SL055A Rev.: A
Scale: 1"=20'
Page No.: 286 of 314

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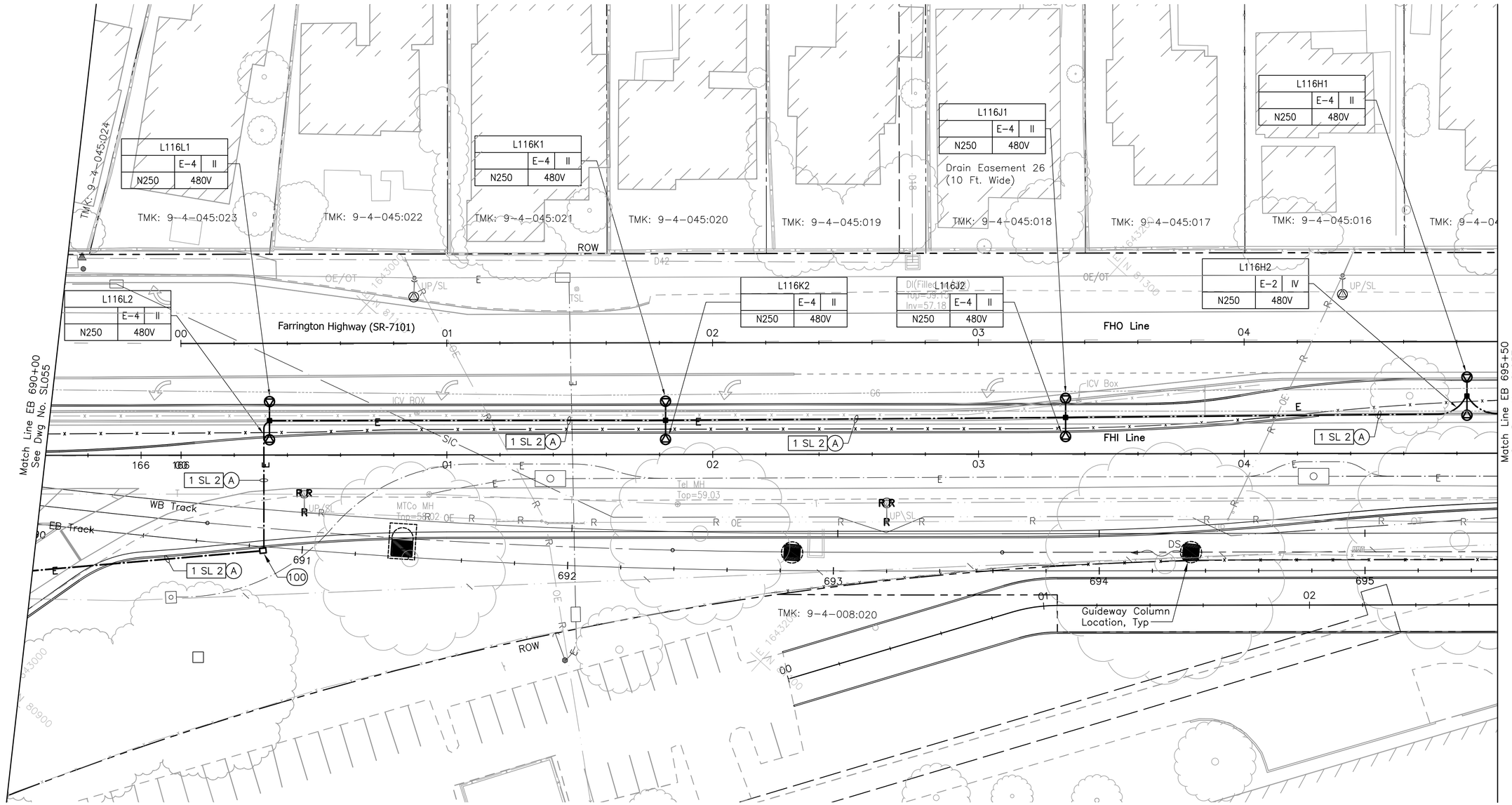

NOTE:

Sandwich Isles Communications (SIC) line is a proposed future communication utility project by others and shown for informational purposes only. The symbols for SIC line are carried from the project design and have not been modified to match standard HHCTCP symbols.

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant: MKengineers
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Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

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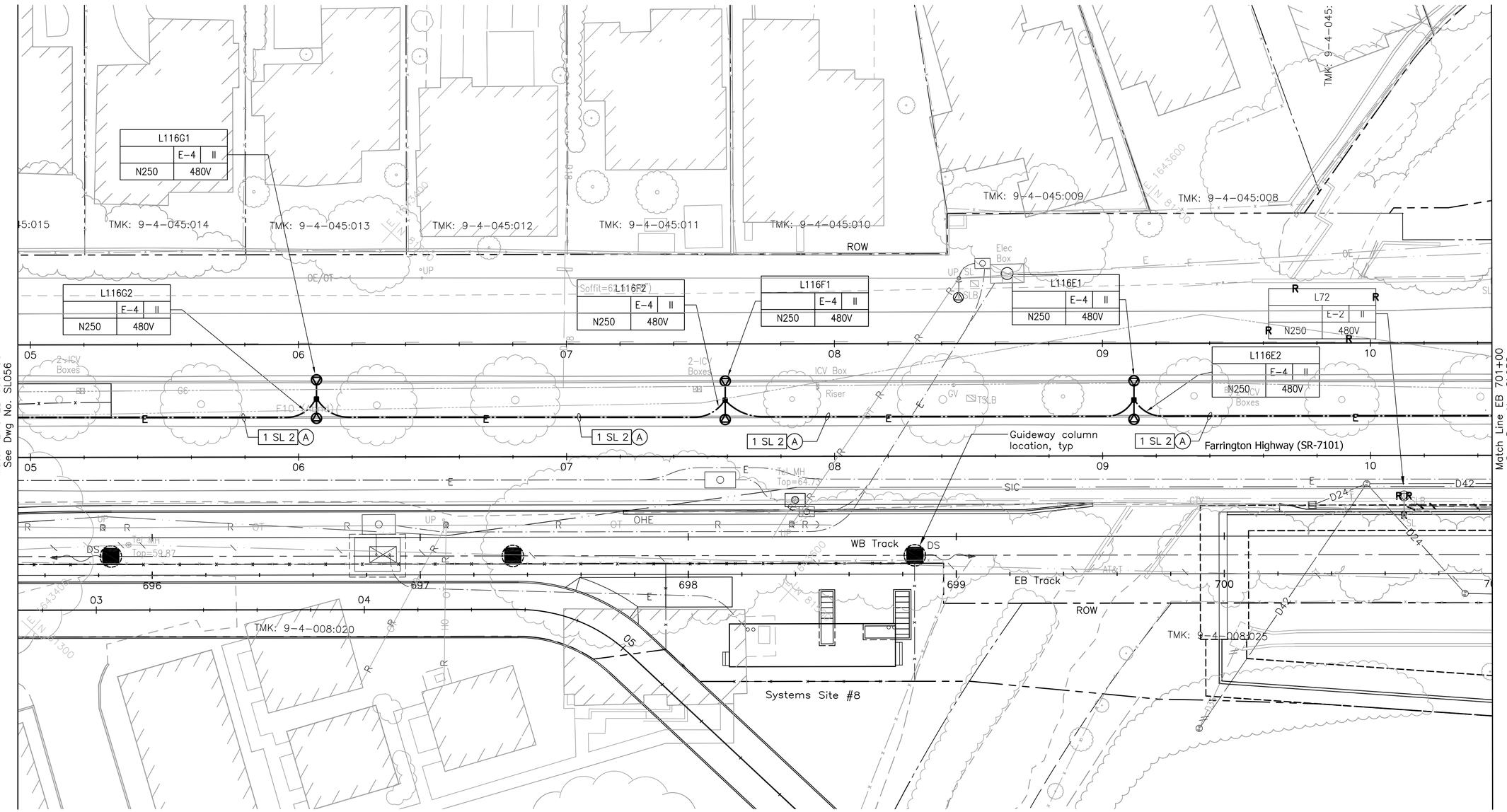
WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 690+00 TO EB 695+50

Contract No.: DB-1200
CADD File: WF-D04-SL056
Drawing No.: SL056 Rev. B
Scale: 1"=20'
Page No. 287 of 314

P:\01_PROJECTS\2007\07081-HHCTC\SES-8_CDwg\WF-D04-SL035-SL057.dwg, WF-D04-SL056, 5/19/2009 3:58:52 PM, Fay, 1:1



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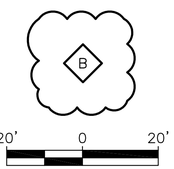

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 695+50 TO EB 701+00

Contract No.: DB-1200
CADD File: WF-D04-SL057
Drawing No.: SL057 Rev. B
Scale: 1"=20'
Page No. 288 of 314

P:\01_PROJECTS\2007\07081-HHCTCSEC\8_CAD\eg\WF-D04-SL\35-SL057.dwg, WF-D04-SL057, 5/19/2009 4:03:51 PM, Fay, 1:1

Match Line
See Dwg No. SL058A

L118		
	E-4	II
N250	480V	

TMK: 9-4-046:002

L116D1		
	E-4	II
N250	480V	

L116D2		
	E-4	II
N250	480V	

L117		
	E-4	II
N250	480V	

L116C1		
	E-4	II
N250	480V	

L116B1		
	E-4	II
	480V	

L116		
	E-4	II
N250	480V	

L116A1		
	E-4	III
	480V	

L116A2		
	E-4	II
N250	480V	

L116B2		
	E-4	II
	480V	

L116C2		
	E-4	II
N250	480V	

L71		
	E-2	II
N250	480V	

L-70		
	E-2	II
N250	480V	

L-70		
	E-2	III
N250	480V	

1 SL 2

1 SL 2 A

2 SL 2 B

FH0 Line

FHI Line

Farrington Highway (SR-7101)

For sign connection

Disconnect sign "S1" light

Remove street light pole & light fixture. Intercept existing conduit from east and terminate in new pullbox.

Preserve

WB Track

EB Track

ROW

Match Line EB 701+00
See Dwg No. SL057

Match Line EB 706+50
See Dwg No. SL059

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NOTES:

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

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Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 701+00 TO EB 706+50 SHEET 1 OF 2

Contract No.: DB-1200
CADD File: WF-D04-SL058
Drawing No: SL058 Rev. B
Scale: 1"=20'
Page No. 289 of 314

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NOTES:

15 See one-line diagram on Drawing UP410 for replacement of circuit E-4. Remove existing conductors and install new conductors. Connect existing and new lighting fixtures to new circuit conductors. Schedule and perform work so that the affected roadways are illuminated during hours of darkness.

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 701+00 TO EB 706+50 SHEET 2 OF 2

Contract No.: DB-1200
CADD File: WF-D04-SL058A
Drawing No: SL058A
Rev.: B
Scale: 1"=20'
Page No.: 290 of 314

I_PROJECTS\2007\07038-HHCTC\SE\Sdt_CDwg\WF-D04-SL035-SL087.dwg, WF-D04-SL058A, 5/18/2009 4:05:55 PM, Fay, 1:1

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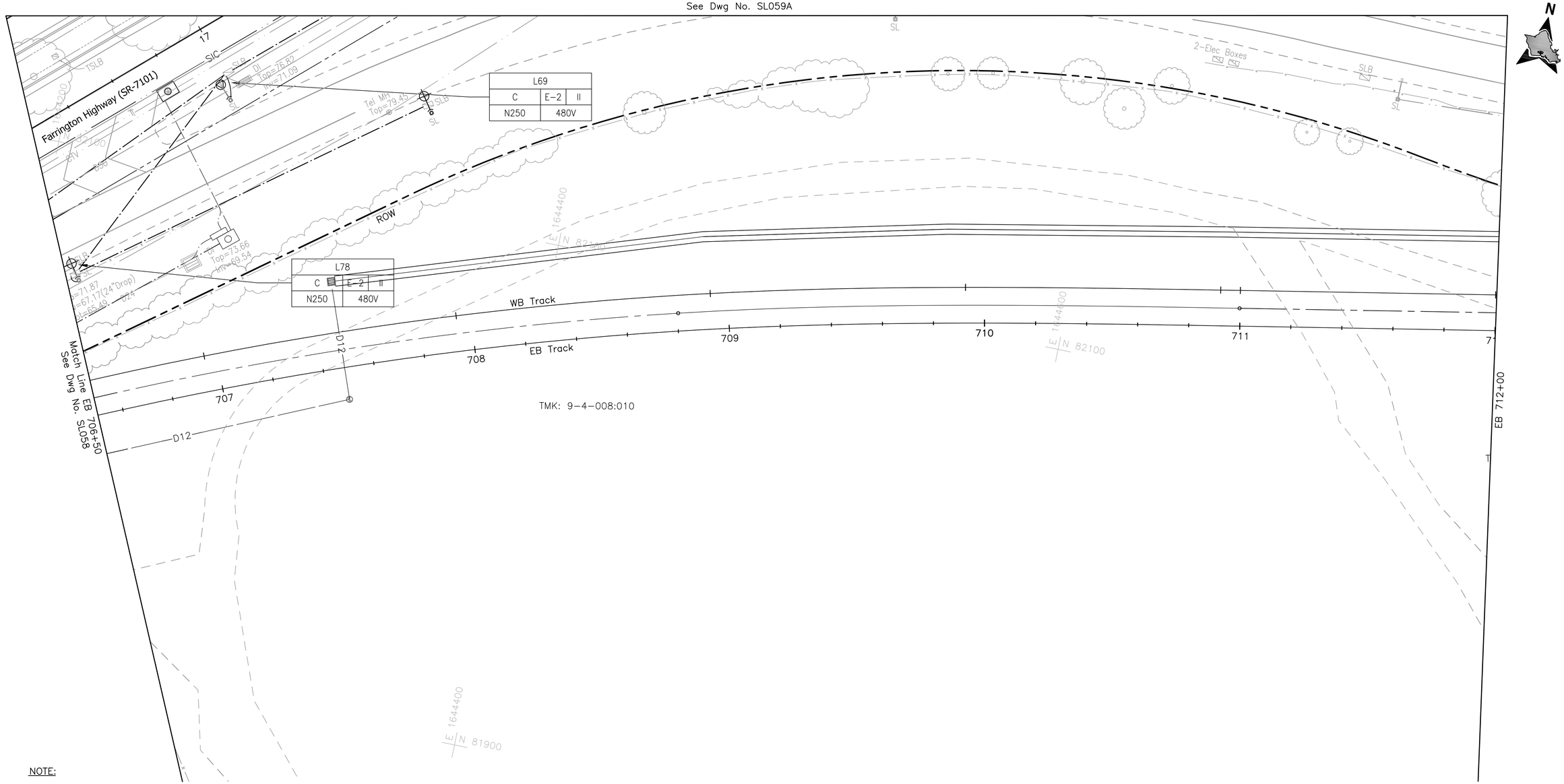
See Dwg No. SL059A



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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 706+50 TO EB 712+00 SHEET 1 OF 5

Contract No.: DB-1200
CADD File: WF-D04-SL059
Drawing No.: SL059 Rev.: A
Scale: 1"=20'
Page No.: 291 of 314

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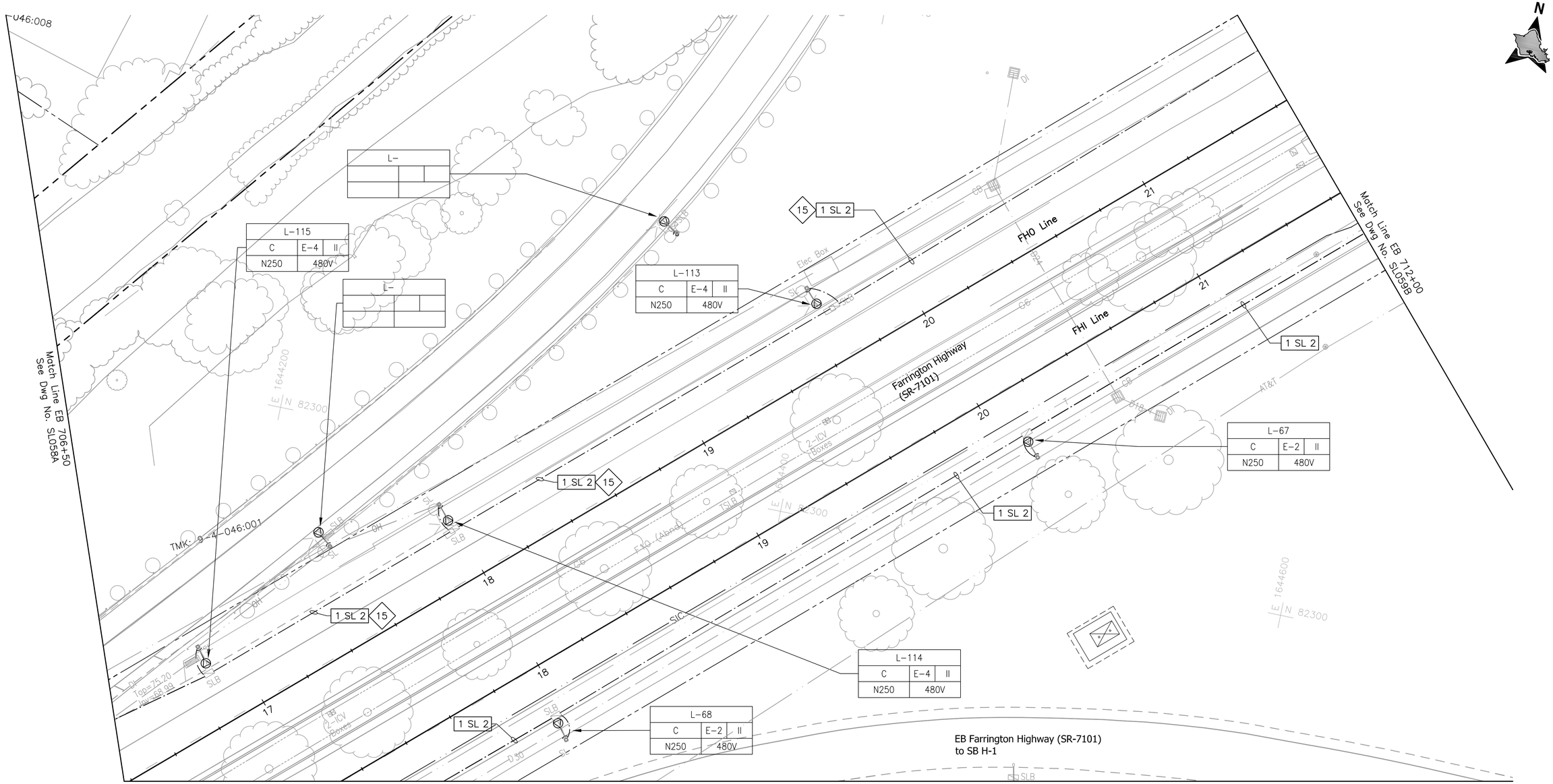

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NOTES:

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B

20' 0 20'

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 706+50 TO EB 712+00 SHEET 2 OF 5

Contract No.: DB-1200
CADD File: WF-D03-SL059A
Drawing No.: SL059A Rev. B
Scale: 1"=20'
Page No. 292 of 314

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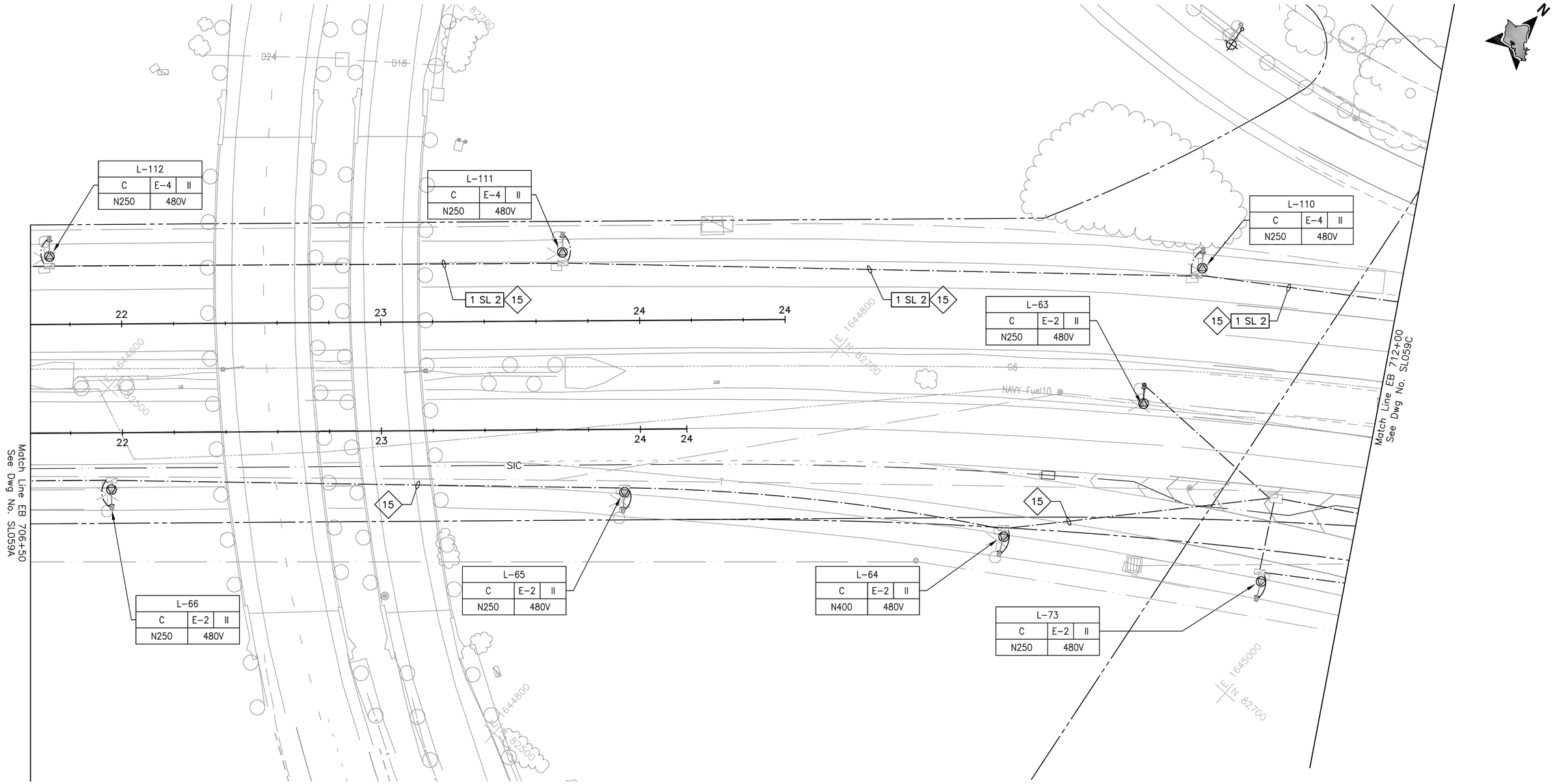

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 706+50 TO EB 712+00 SHEET 3 OF 5

Contract No.: DB-1200
CADD File: WF-D03-SL059B
Drawing No.: SL059B Rev.: A
Scale: 1"=20'
Page No.: 293 of 314

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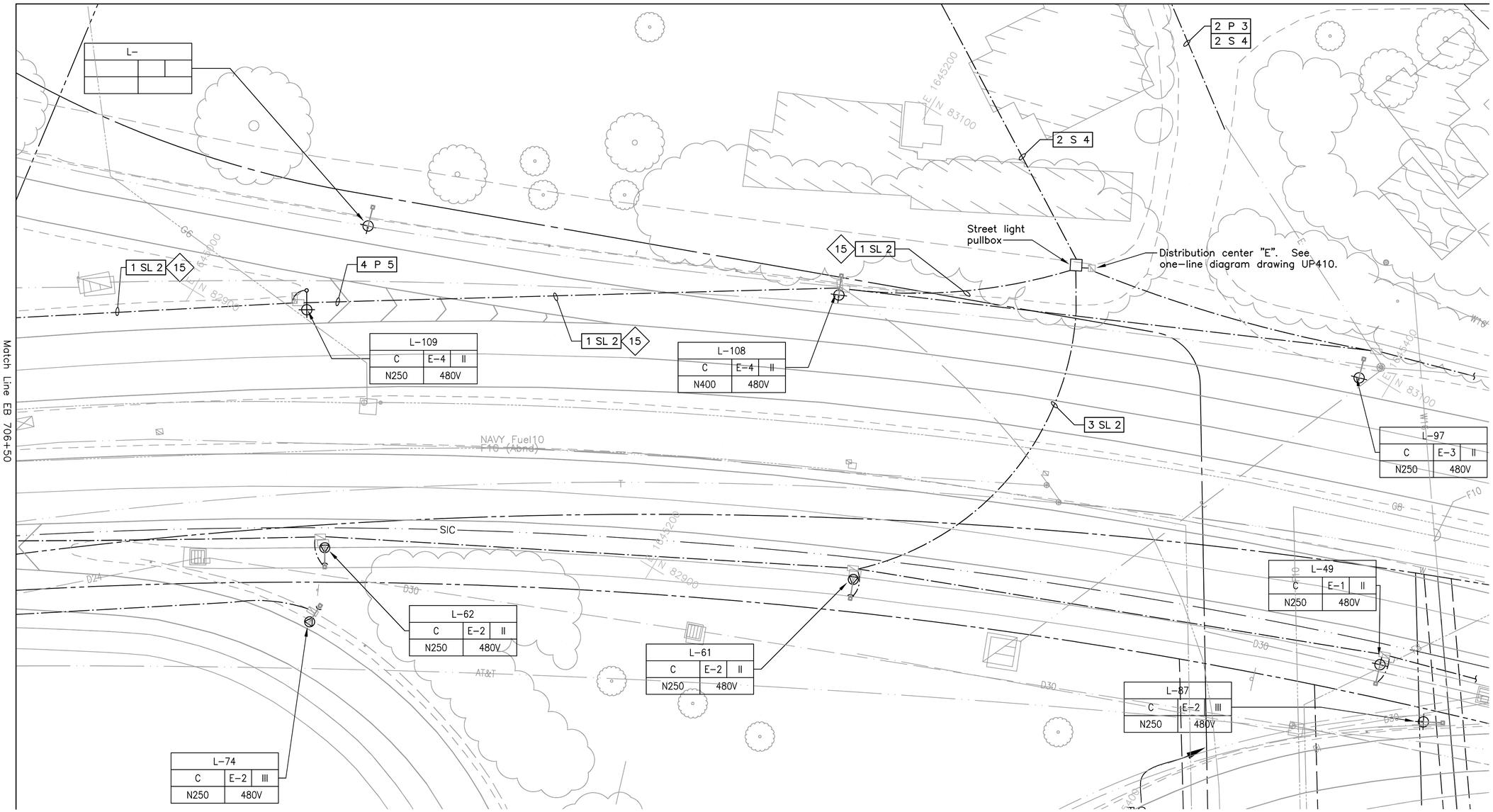
Match Line
See Dwg No. SL059D



Match Line EB 706+50
See Dwg No. SL059B

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20' 0 20'

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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 706+50 TO EB 712+00 SHEET 4 OF 5

Contract No.: DB–1200
CADD File: WF–D03–SL059C
Drawing No: SL059C Rev. A
Scale: 1"=20'
Page No. 294 of 314

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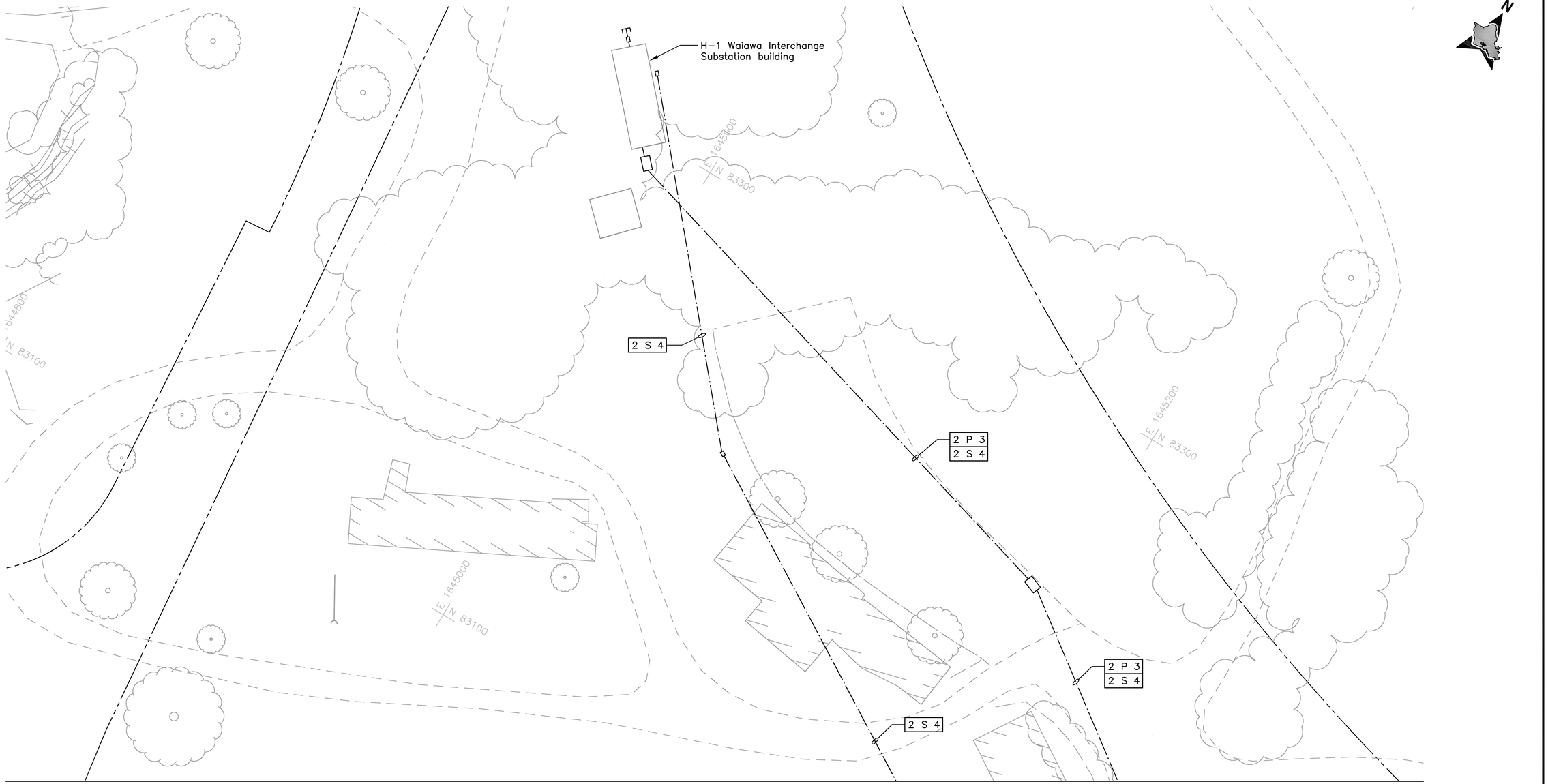

Match Line
See Dwg No. SL059C

NOTE:

This drawing is included to show the location of the substation that serves the H–1 Waiawa Interchange.

20' 0 20'

Rev	By	Date	Description
A	RCK	04–03–09	Issued For Bid

BID DOCUMENT
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Date: 04–03–09

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 706+50 TO EB 712+00 SHEET 5 OF 5

Contract No.: DB–1200
CADD File: WF–D03–SL059D
Drawing No.: SL059D
Rev.: A
Scale: 1"=20'
Page No.: 295 of 314

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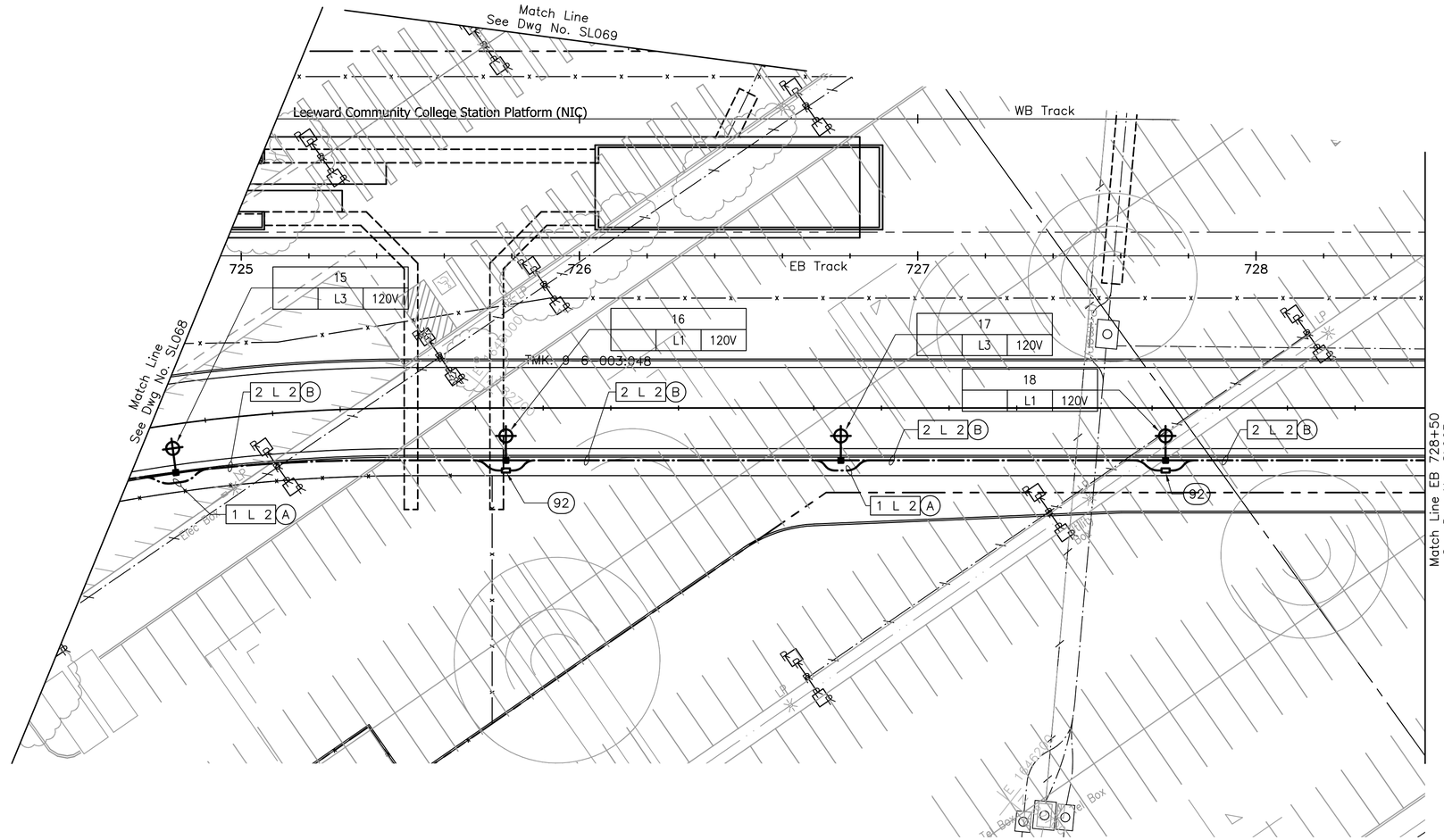

B

20' 0 20'

Rev	By	Date	Description
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NOT FOR CONSTRUCTION

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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 723+00 TO EB 728+50

Contract No.: DB–1200
CADD File: WF–D04–SL062
Drawing No.: SL062 Rev.: B
Scale: 1"=20'
Page No.: 296 of 314

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NOTE:

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Rev	By	Date	Description
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

EB 728+50 TO EB 734+00

Contract No.: DB-1200
CADD File: WF-D04-SL063
Drawing No: SL063 Rev. B
Scale: 1"=20'
Page No. 297 of 314

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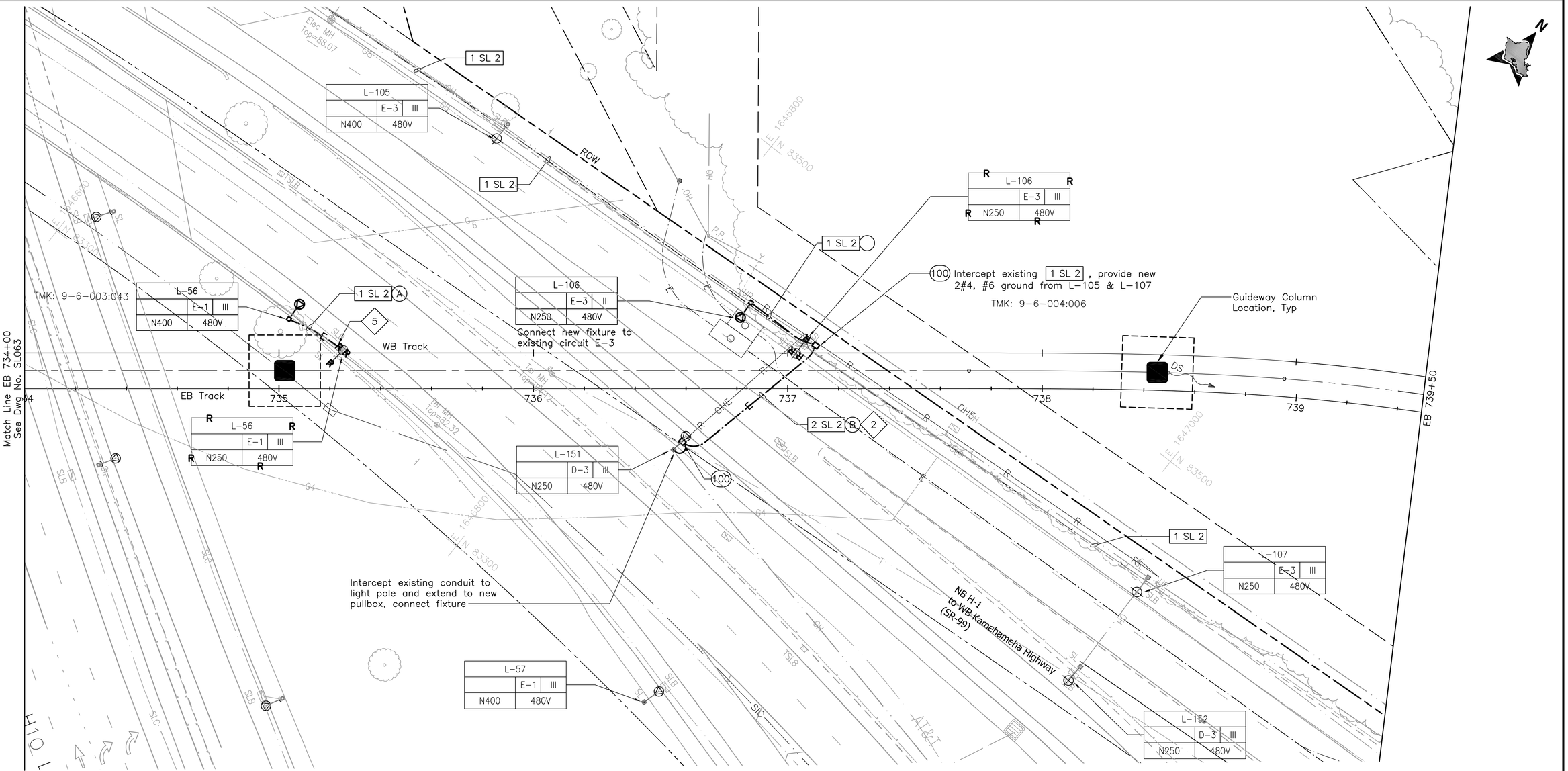

NOTE:

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NOTES:

2 Provide 3#2, #8 ground in conduit, PBS, risers and make connections to replace overhead conductors.

5 Install conduits into manhole, handhole, or pullbox under applicable utility company supervision. See Detail 3/UP301.

B

20' 0 20'

Rev	By	Date	Description
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WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN
STREET LIGHTING

EB 734+00 TO EB 739+50

Contract No.: DB-1200
CADD File: WF-D04-SL064
Drawing No: SL064 Rev. B
Scale: 1"=20'
Page No. 298 of 314

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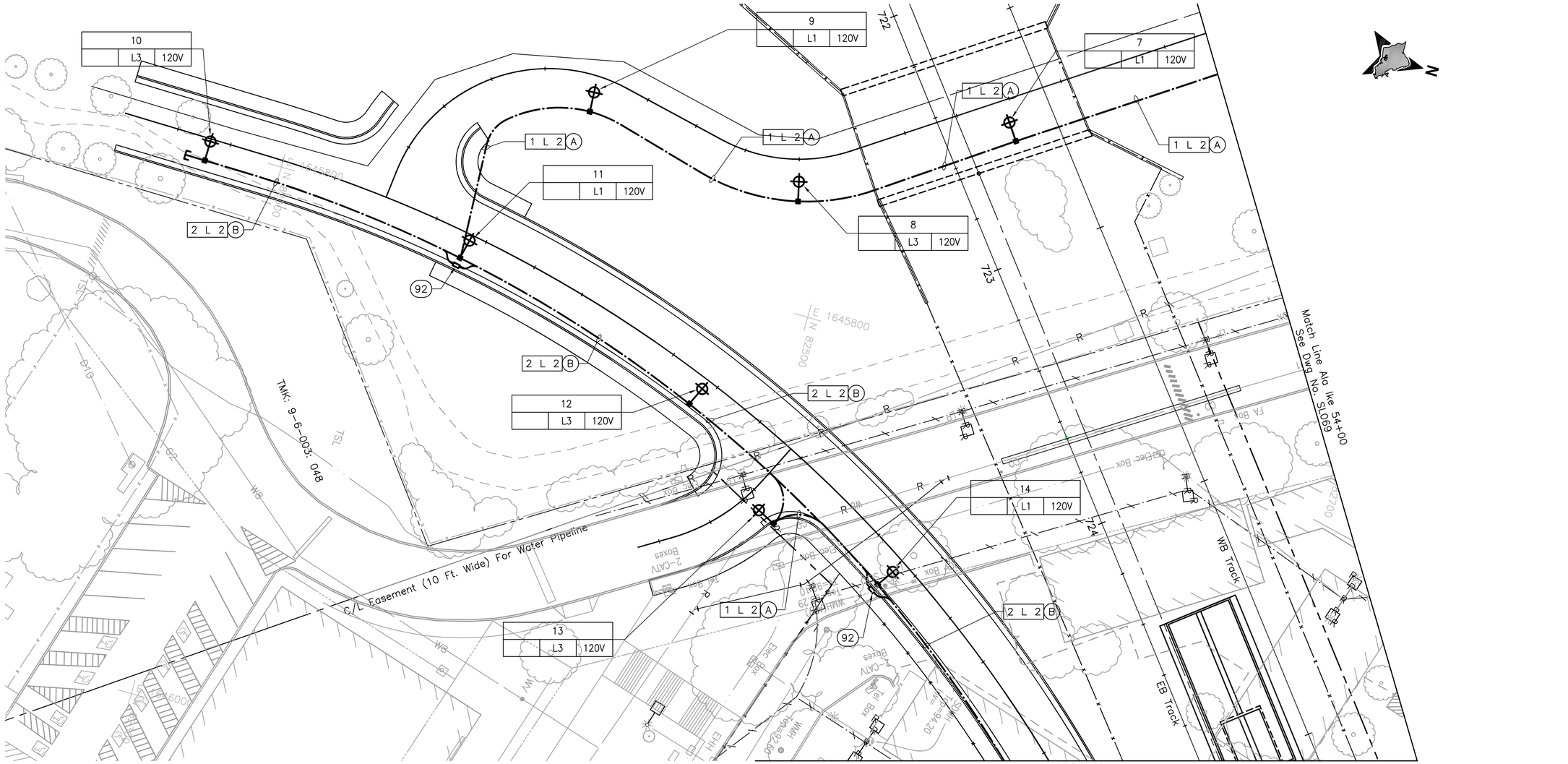

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant: MKengineers
286 Kalihi Street
Honolulu, Hawaii 96819
Phone: (808) 848-8622
Fax: (808) 848-5574
E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

ALA `IKE STREET SHEET 1 OF 3

Contract No.: DB-1200
CADD File: WF-D03-SL068
Drawing No.: SL068 Rev. B
Scale: 1"=20'
Page No. 299 of 314

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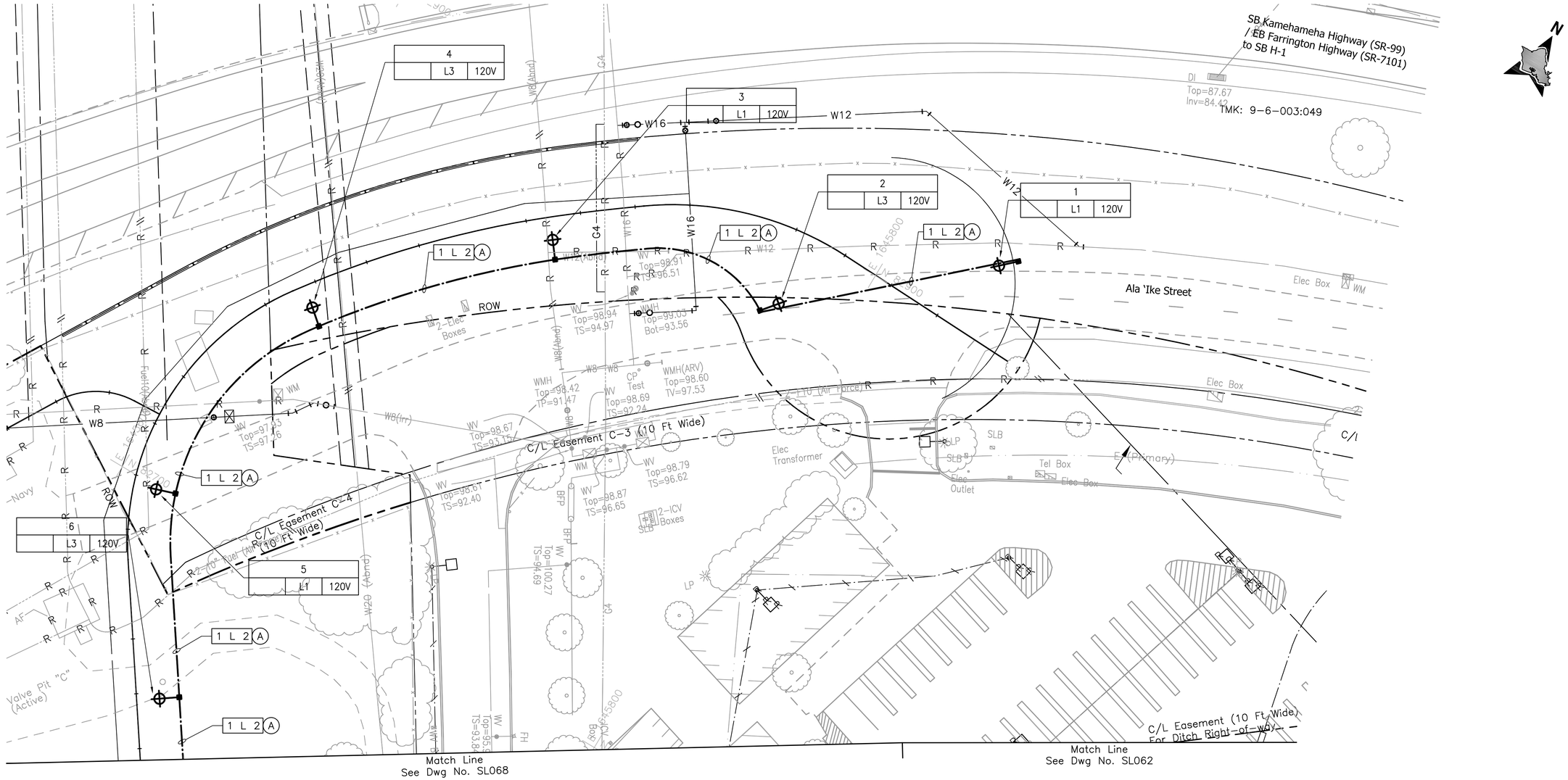

B

20' 0 20'

Rev	By	Date	Description
B	FKH	05-22-09	Update Drawing
A	RCK	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: R Katahara
Drawn: D Saito
Checked: P Uyeda
Approved: P Uyeda
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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286 Kalihi Street
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Phone: (808) 848-8622
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E-Mail: info@mkhawaii.com

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O`AHU/FARRINGTON DESIGN-BUILD

UTILITY RELOCATION PLAN STREET LIGHTING

ALA `IKE STREET SHEET 2 OF 3

Contract No.: DB-1200
CADD File: WF-D03-SL069
Drawing No: SL069 Rev. B
Scale: 1"=20'
Page No. 300 of 314

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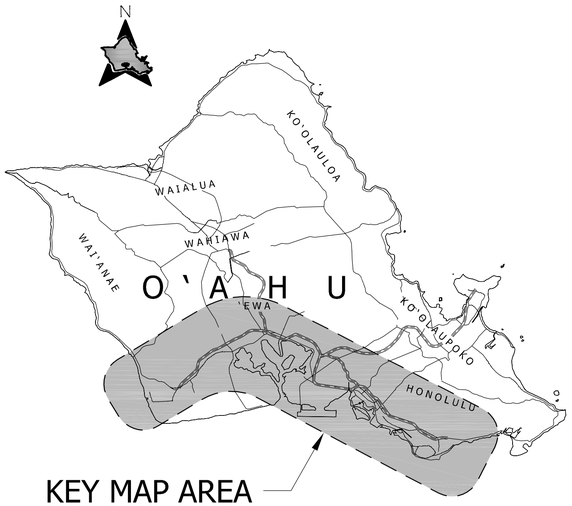
HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

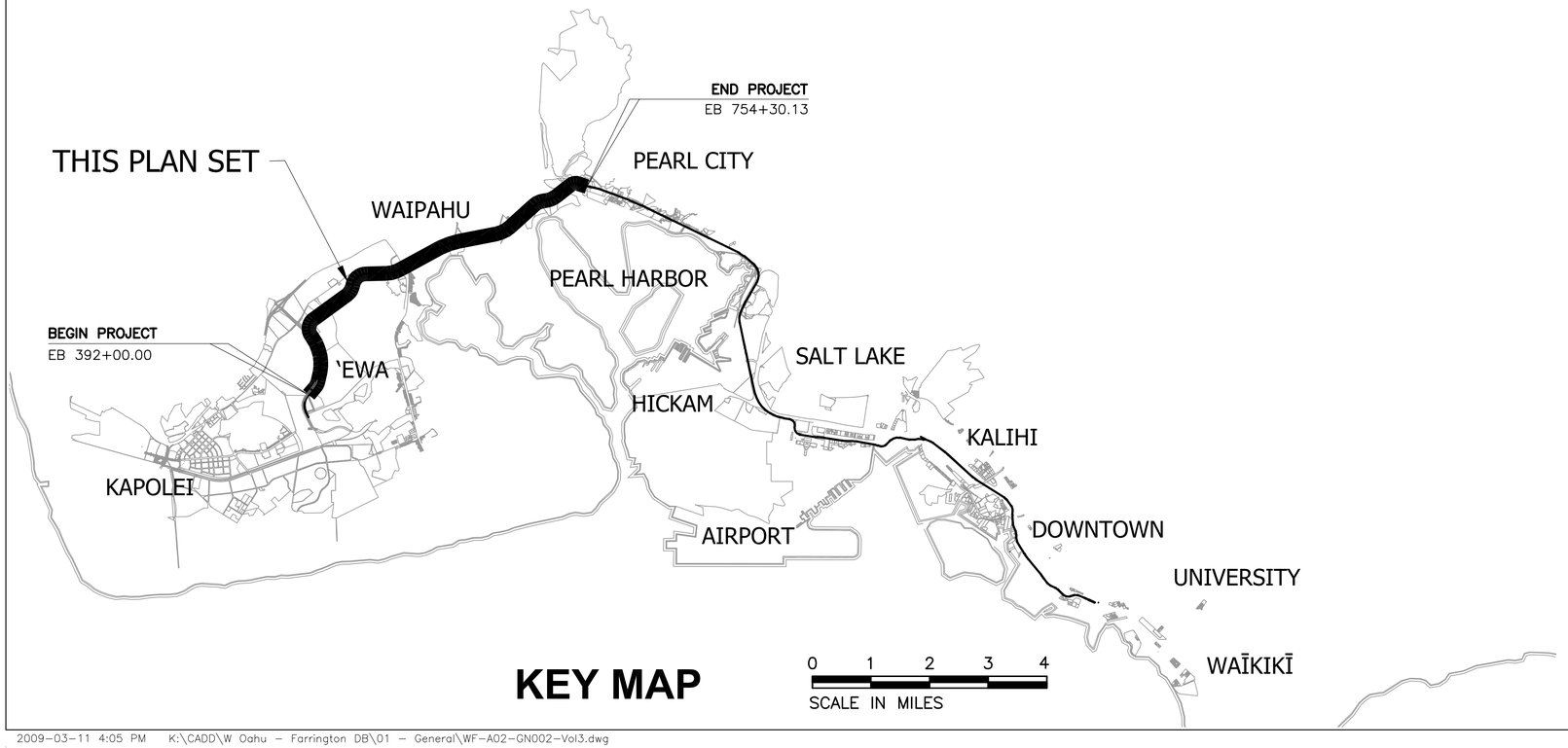
WEST O‘AHU/FARRINGTON DESIGN-BUILD

VOLUME 3 - STRUCTURES, LANDSCAPING, & SYSTEMS



City and County of Honolulu
Department of Transportation Services

Rapid Transit Division



KEY MAP

03 APRIL 2009
ISSUED FOR BID
NOT FOR CONSTRUCTION

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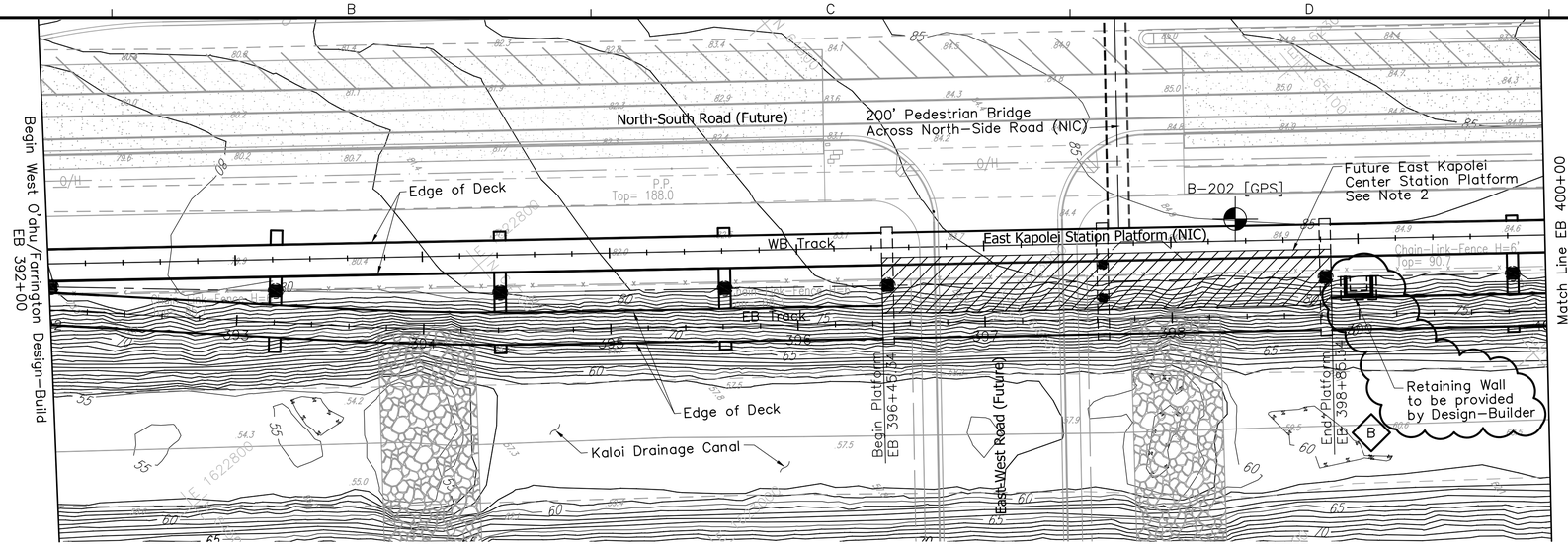

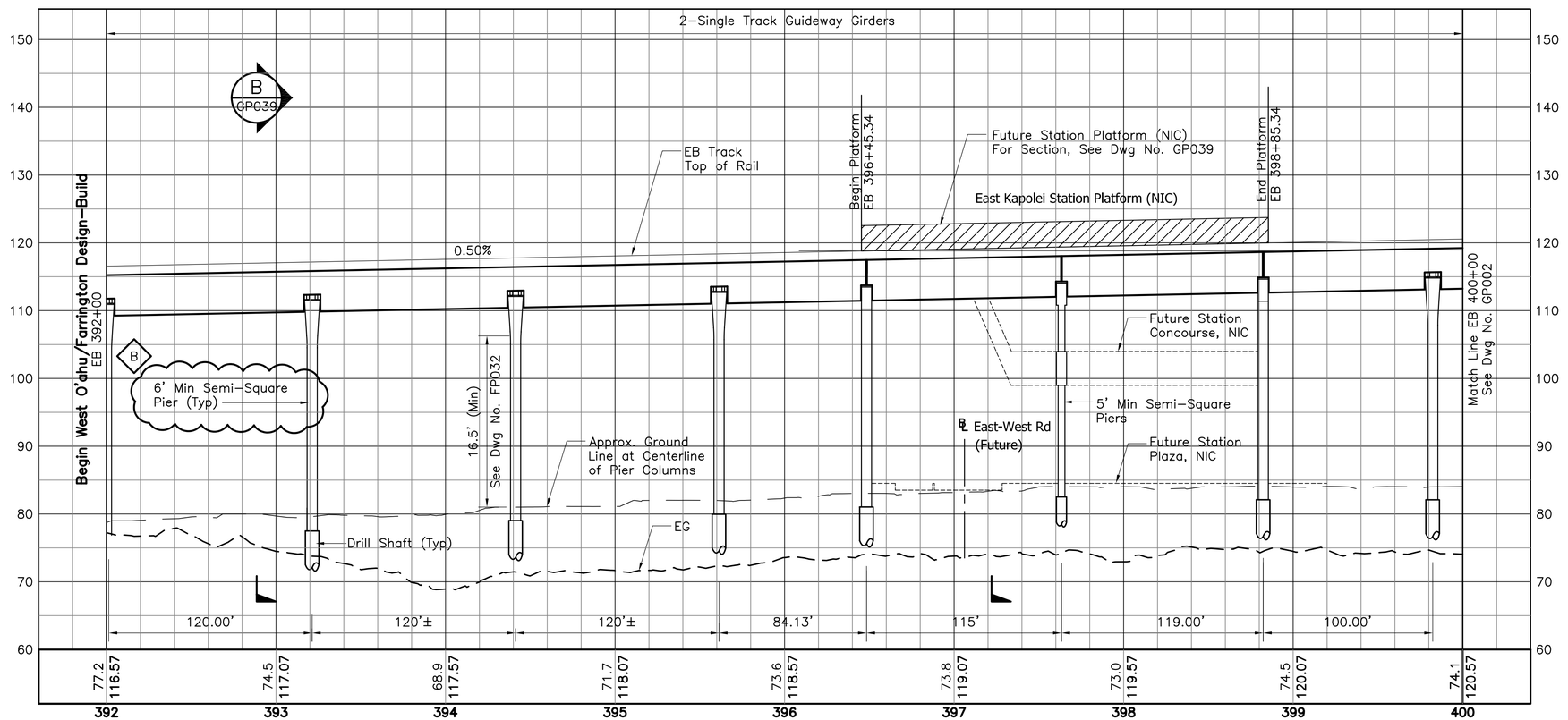

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. For Station Details, See Dwg Nos. FP001 through FP004.
3. The configuration shown relative to NIC work and site condition is under development and subject to change.
4. The depiction of retaining walls is for approximate location only. The type of wall and its foundation required to protect structural facilities against ground movement and settlement is to be determined by the Design-Builder. The Design-Builder shall also provide retaining walls that may not be shown, but are dependant on his approved grading plans.
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7. Unless shown otherwise on the drawings, the semi-square columns, if used, shall not be less than 6-foot by 6-foot, and the associated drilled shafts shall not be less than 8-foot in diameter.

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Added Ret Wall; Added Callout; Rev Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 392+00 TO EB 400+00

Contract No.: DB-1200
CADD File: WF-G04-GP001
Drawing No: GP001 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 22 of 209

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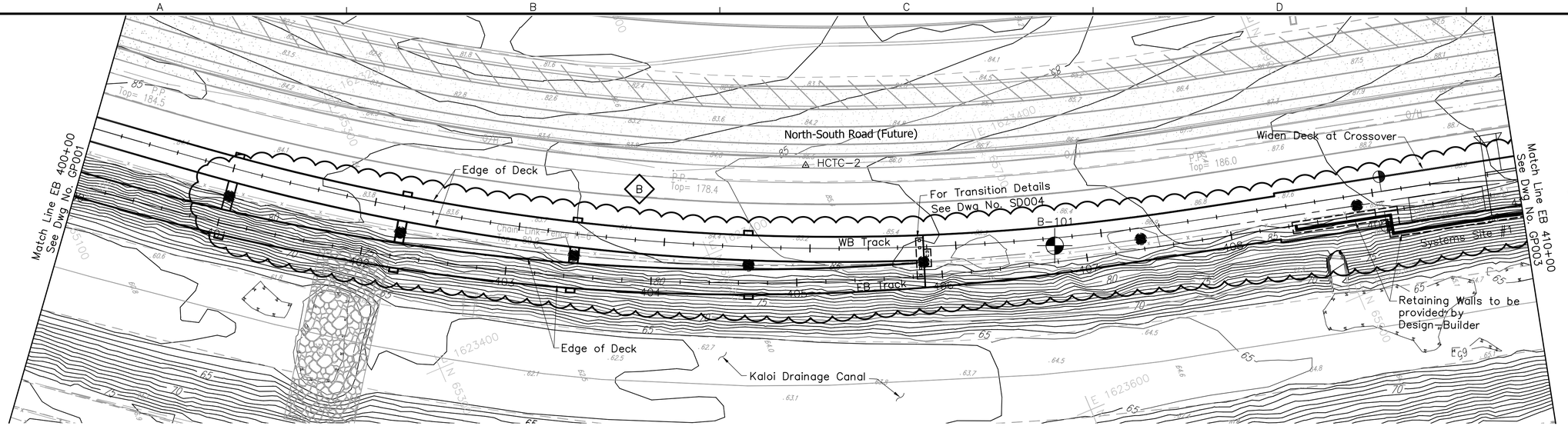

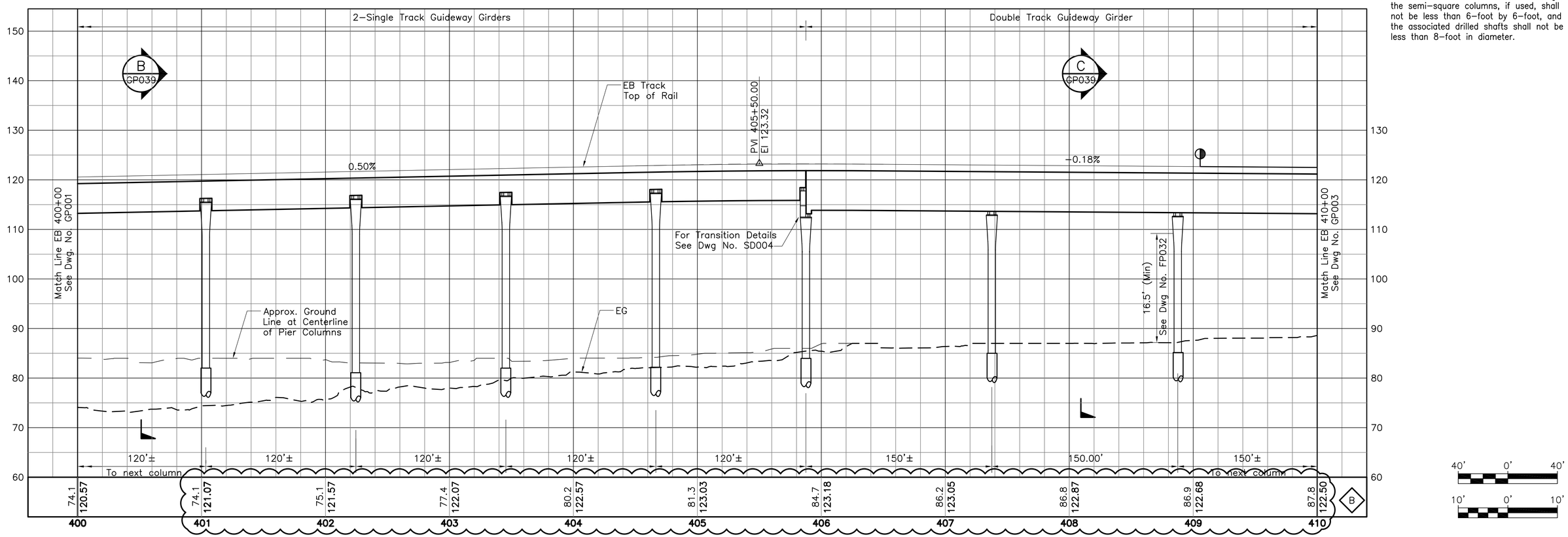

NOTE:

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Rev	By	Date	Description
B	AB	05-22-09	Column Shift; Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 400+00 TO EB 410+00

Contract No.: DB-1200
CADD File: WF-G04-GP002
Drawing No: GP002 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 23 of 209

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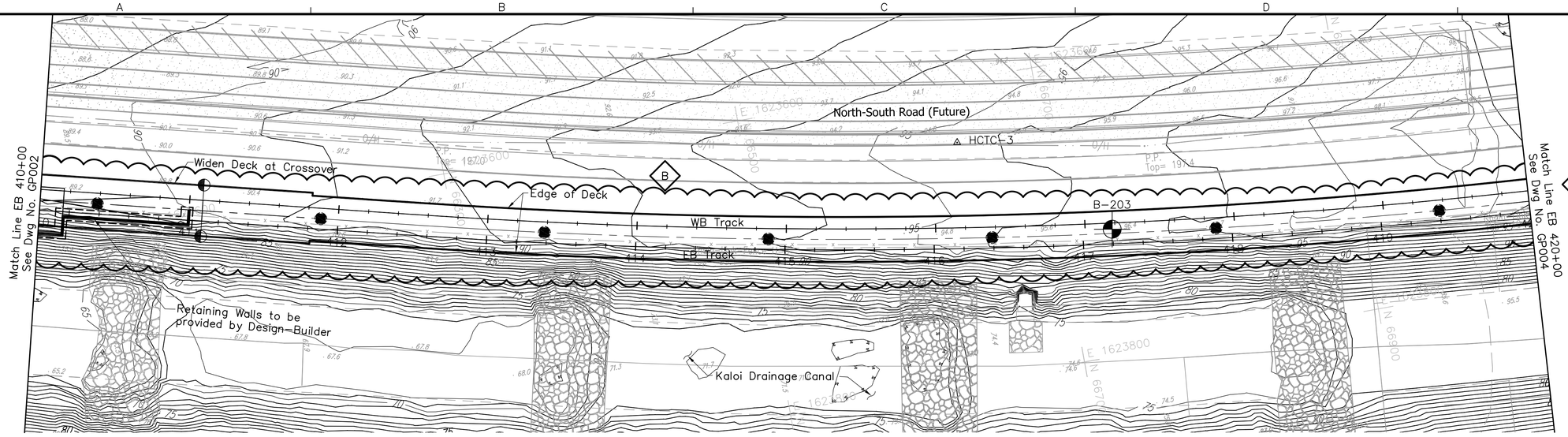

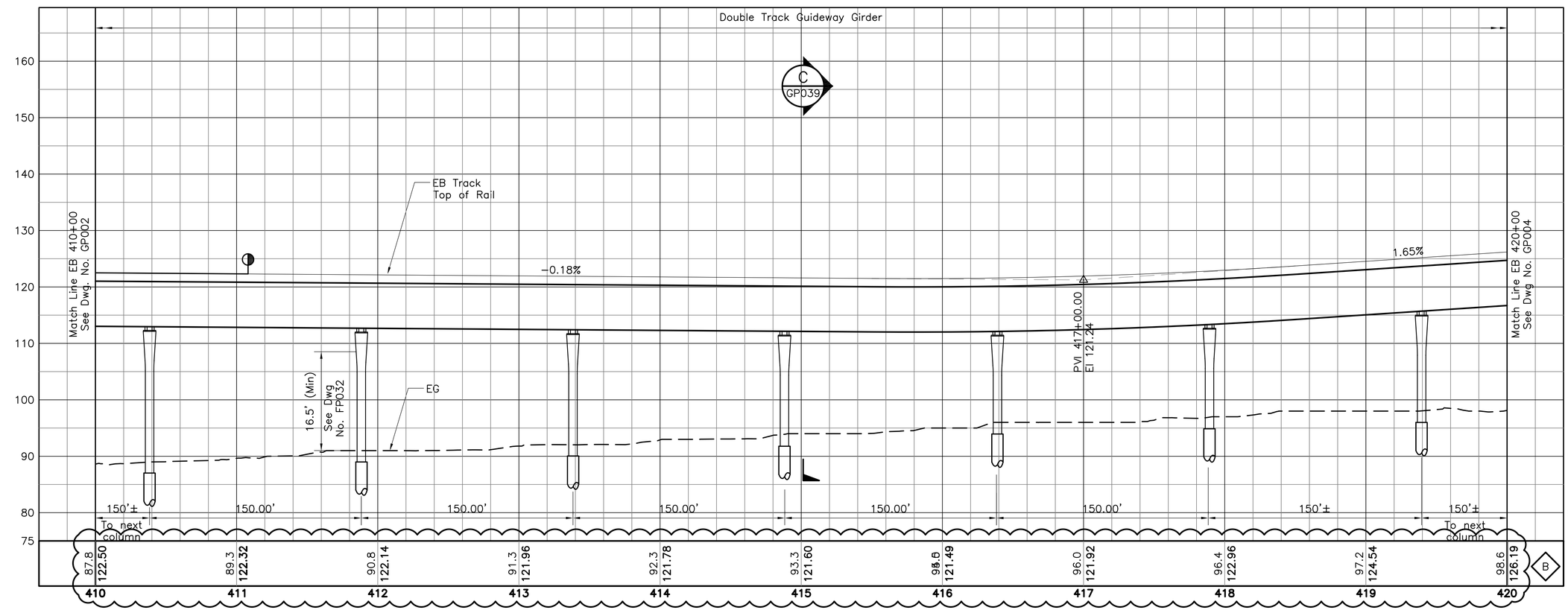

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
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6. Unless shown otherwise on the drawings, the semi–square columns, if used, shall not be less than 6–foot by 6–foot, and the associated drilled shafts shall not be less than 8–foot in diameter.

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05–22–09	Column Shift; Revised Notes
A	AB	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 410+00 EB 420+00

Contract No.: DB–1200
CADD File: WF–G04–GP003
Drawing No.: GP003 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 24 of 209

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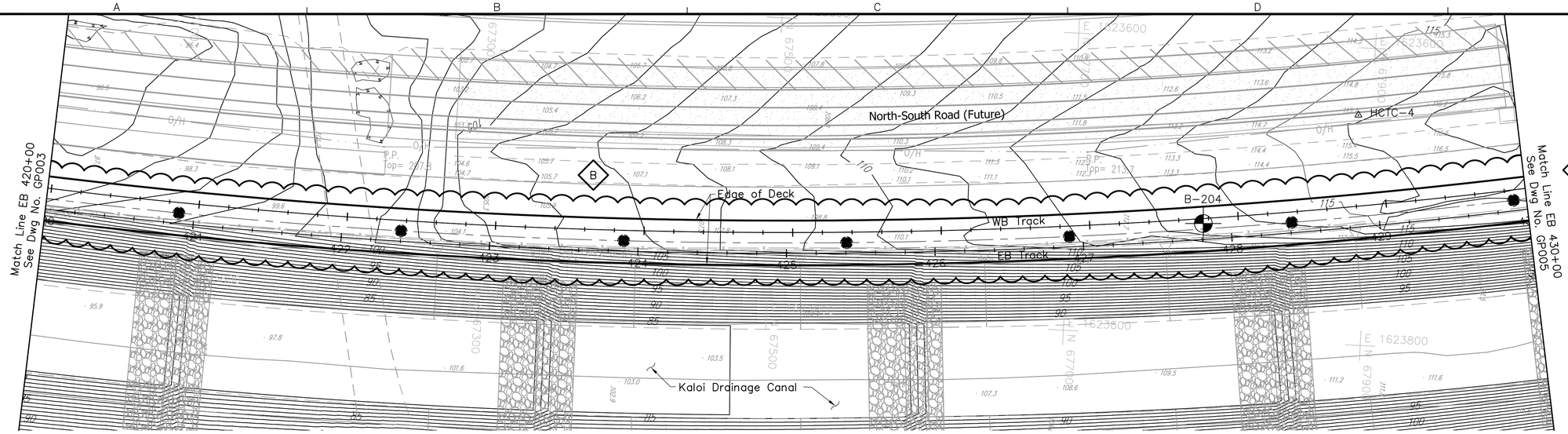

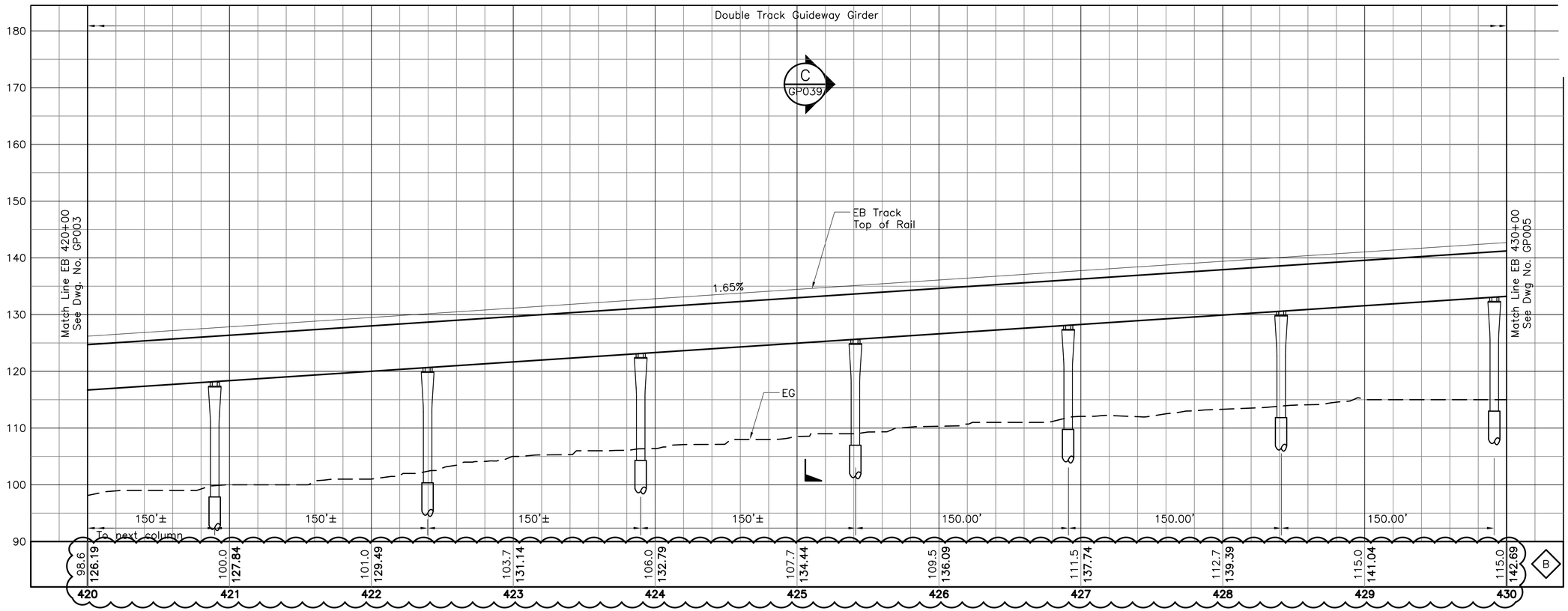

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Column Shift; Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 420+00 TO EB 430+00

Contract No.: DB-1200
CADD File: WF-G04-GP004
Drawing No: GP004 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 25 of 209

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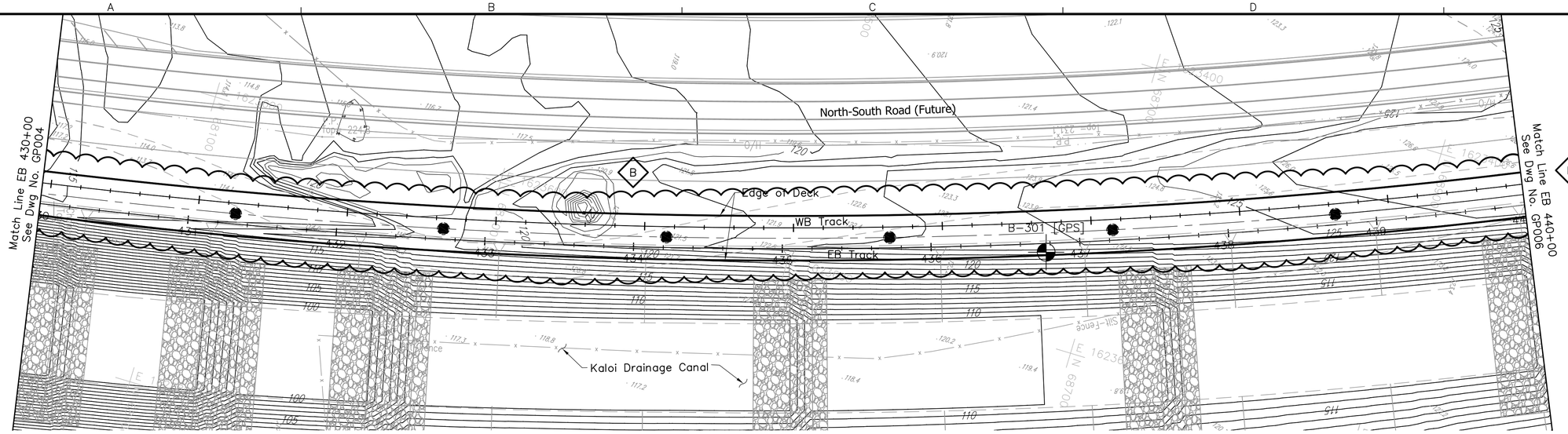

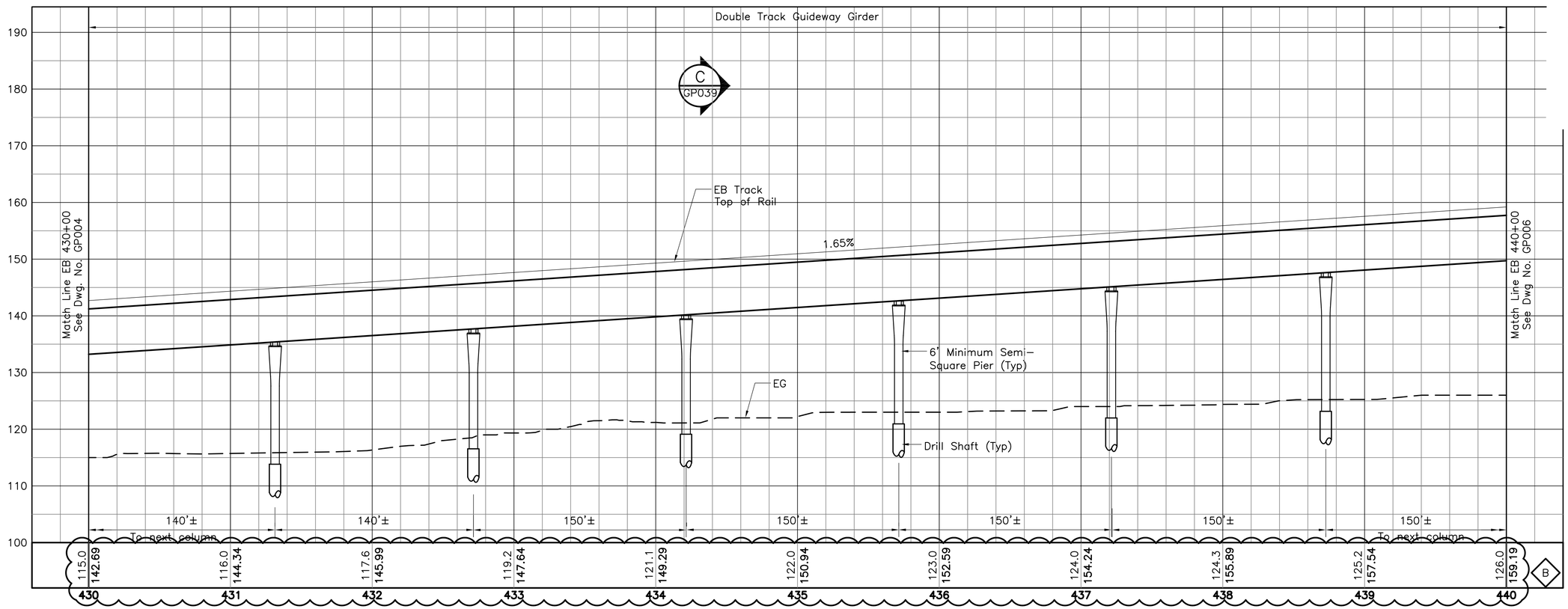

NOTE:

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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Column Shift; Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

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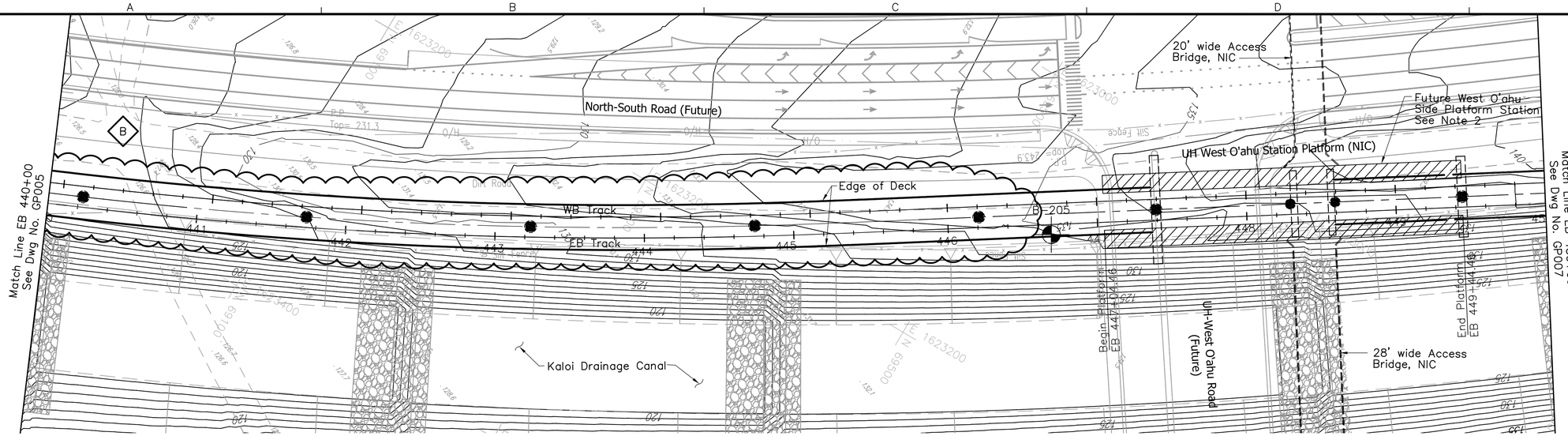
WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 430+00 TO EB 440+00

Contract No.: DB-1200
CADD File: WF-G04-GP005
Drawing No.: GP005 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 26 of 209



NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. For Station Details, See Dwg Nos. FP005 through FP008.
3. The configuration shown relative to NIC work and site condition is under development and subject to change.
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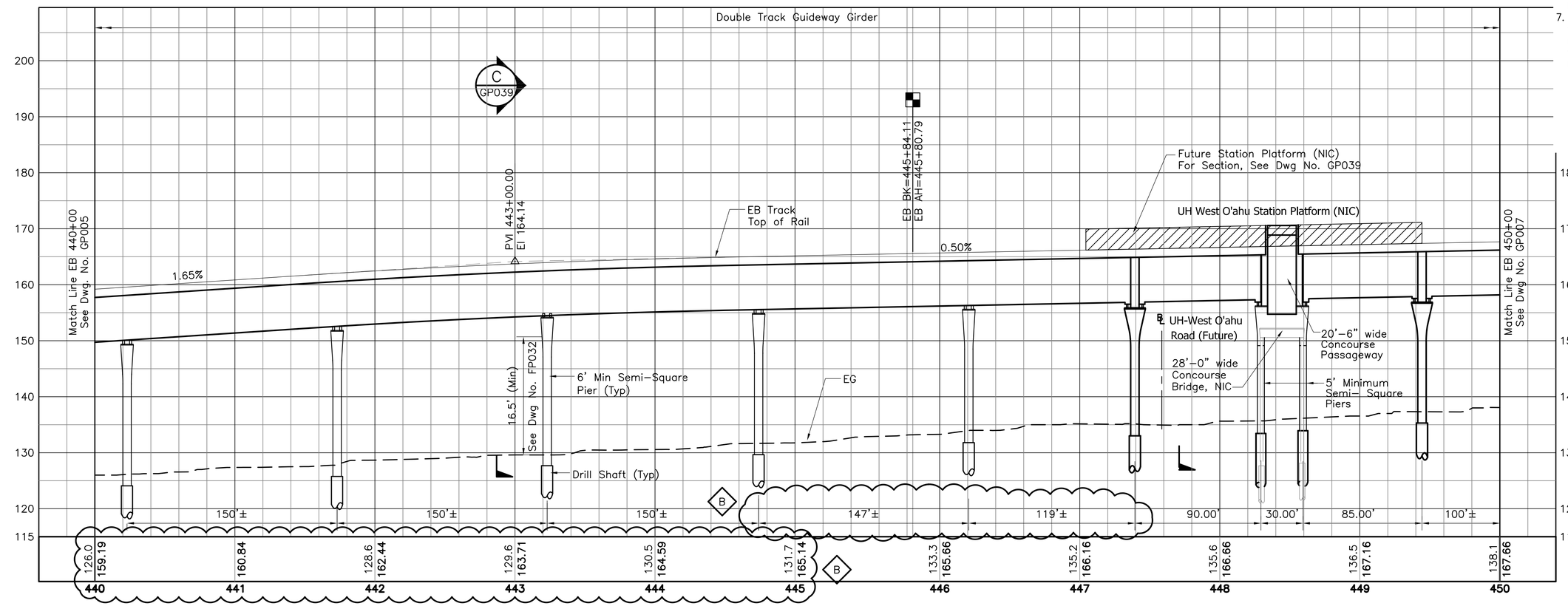

Rev	By	Date	Description
B	AB	05–22–09	Guideway Piers Relocated; Revised Notes
A	AB	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 440+00 TO EB 450+00

Contract No.: DB–1200
CADD File: WF–G04–GP006
Drawing No: GP006 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 27 of 209

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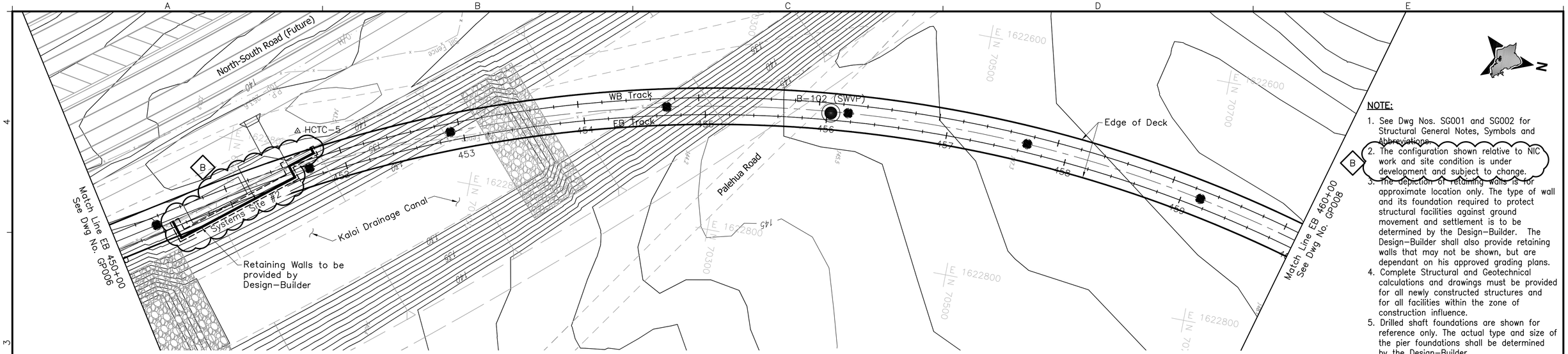

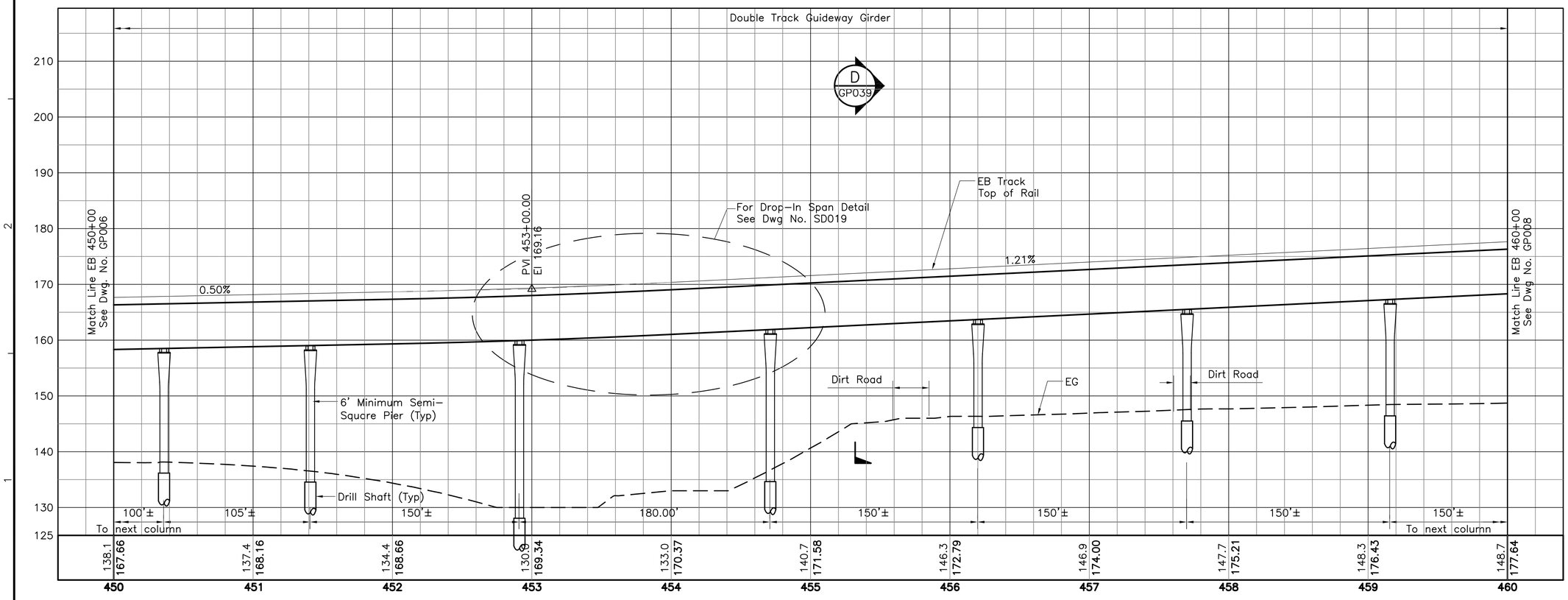

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
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Rev	By	Date	Description
B	AB	05-22-09	Revised Retaining Wall; Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813
Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 450+00 TO EB 460+00

Contract No.: DB-1200
CADD File: WF-G04-GP007
Drawing No: GP007 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 28 of 209

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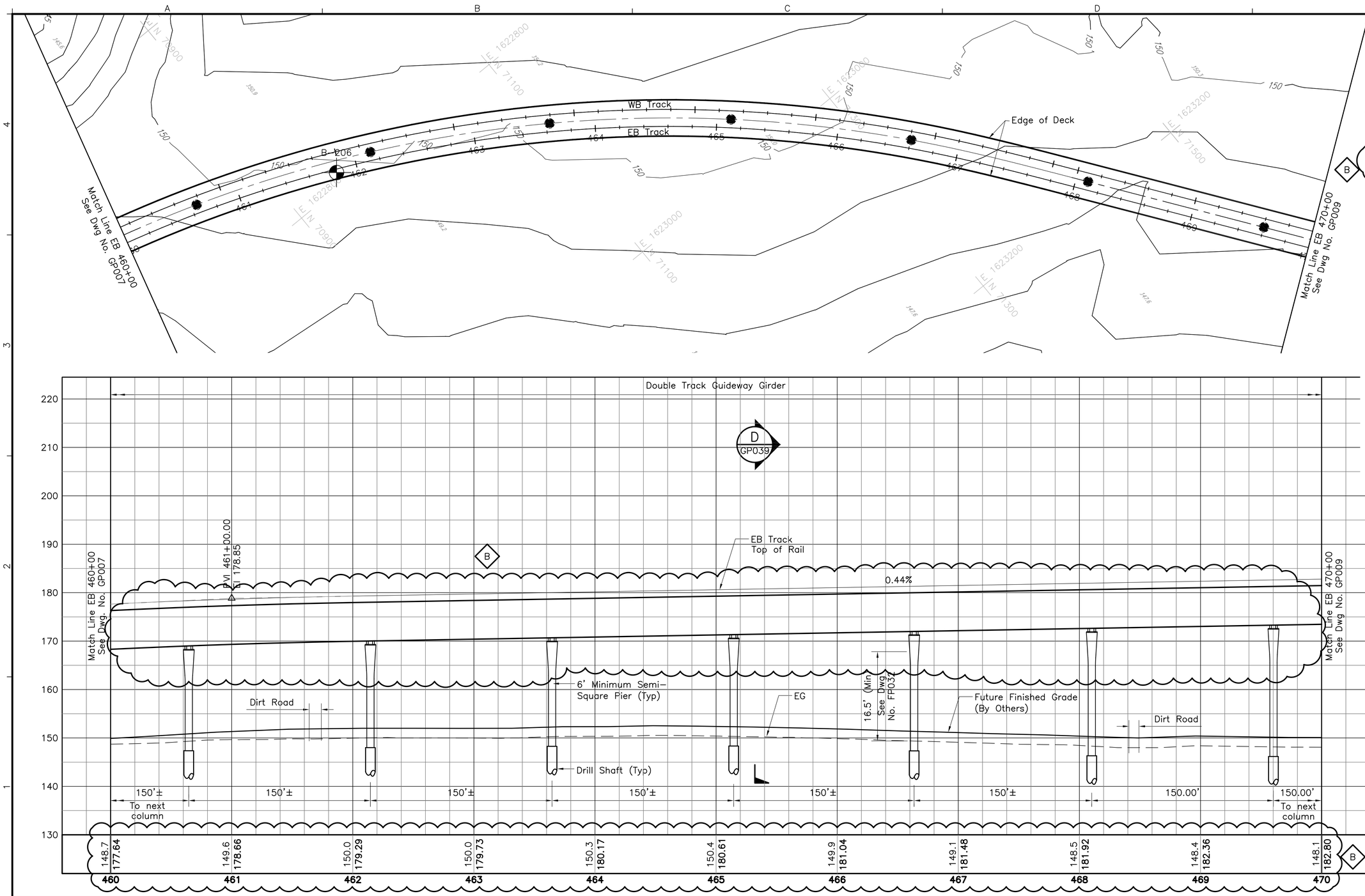

NOTE:

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Rev	By	Date	Description
B	AB	05-22-09	Lowered Guideway/Columns; Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 460+00 TO EB 470+00

Contract No.: DB-1200
CADD File: WF-G04-GP008
Drawing No.: GP008 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 29 of 209

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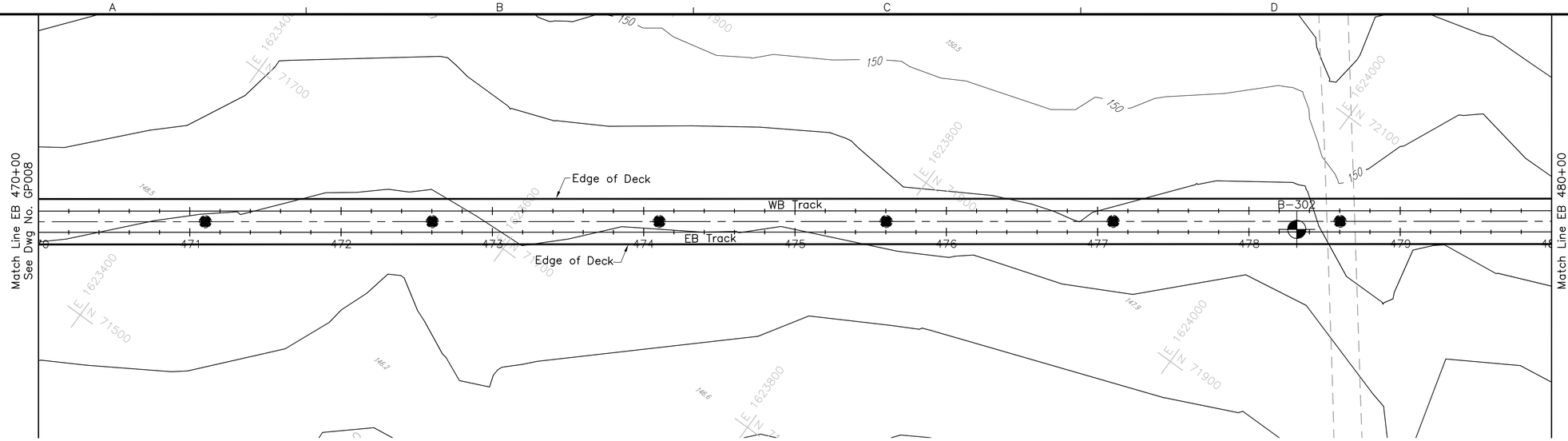

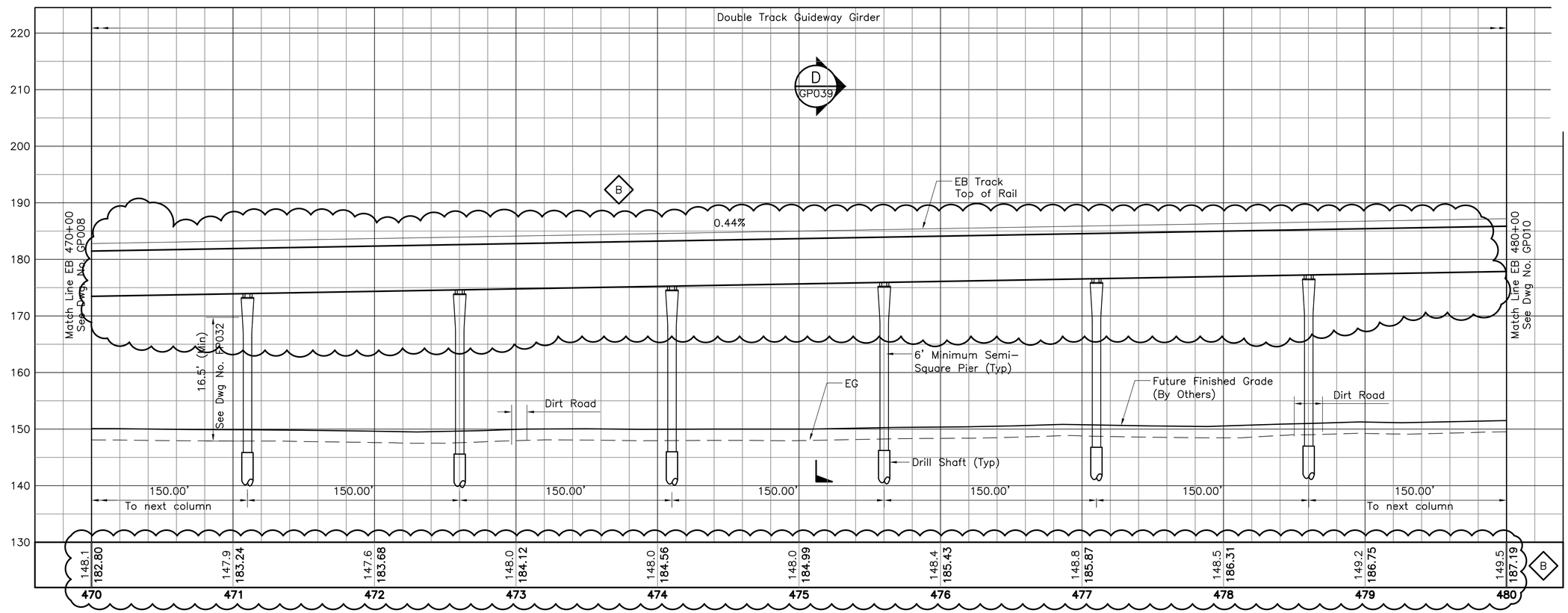

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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05–22–09	Lowered Guideway/Columns; Revised Notes
A	AB	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 470+00 TO EB 480+00

Contract No.: DB–1200
CADD File: WF–G04–GP009
Drawing No: GP009 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 30 of 209

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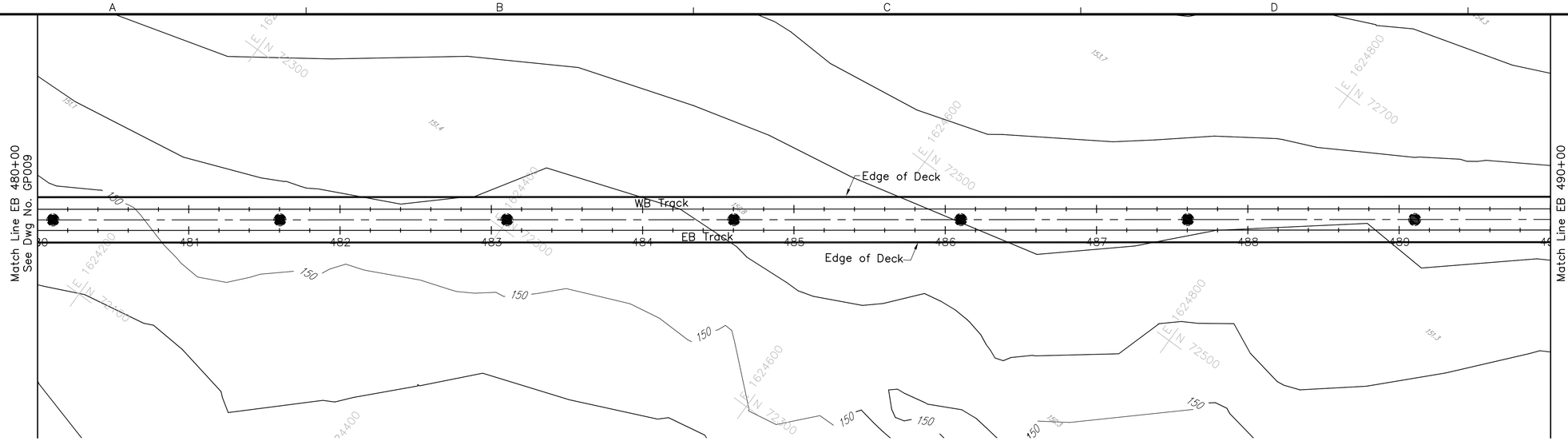

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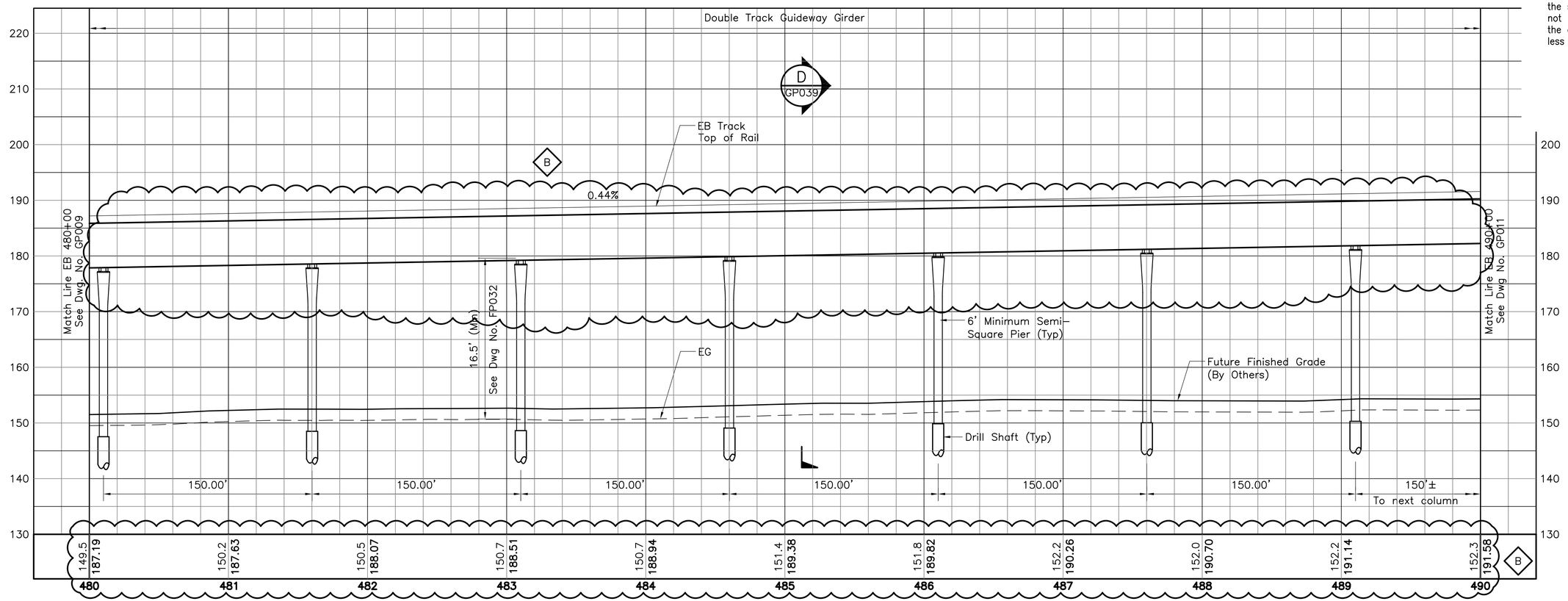

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 480+00 TO EB 490+00

Contract No.: DB–1200
CADD File: WF–G04–GP010
Drawing No: GP010 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 31 of 209

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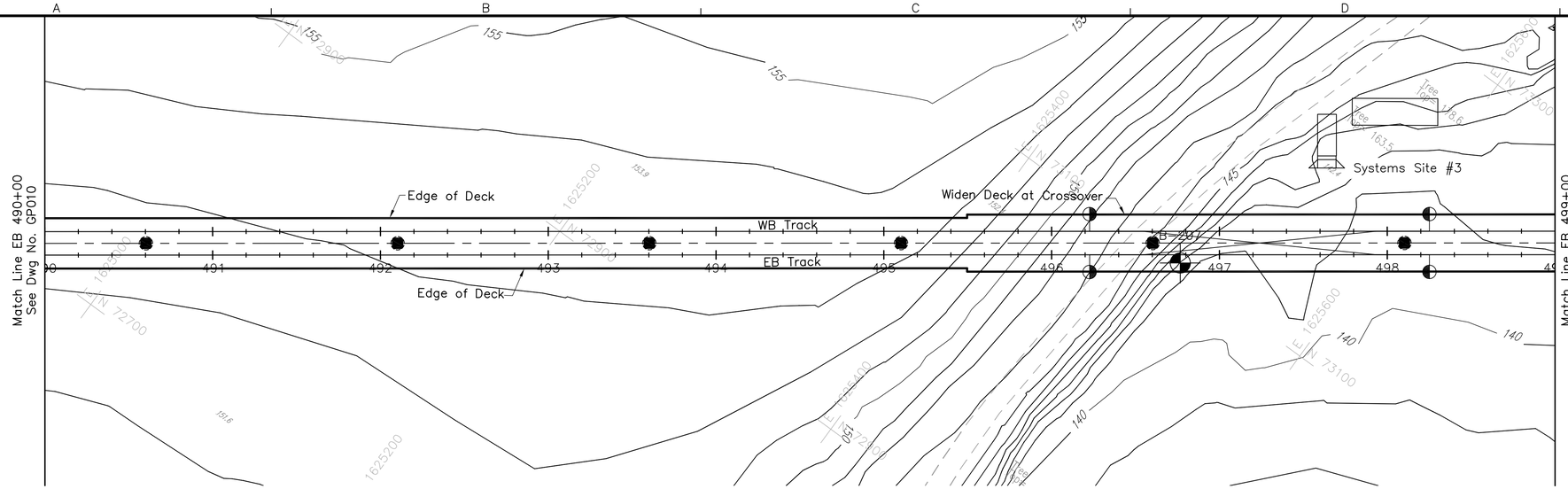

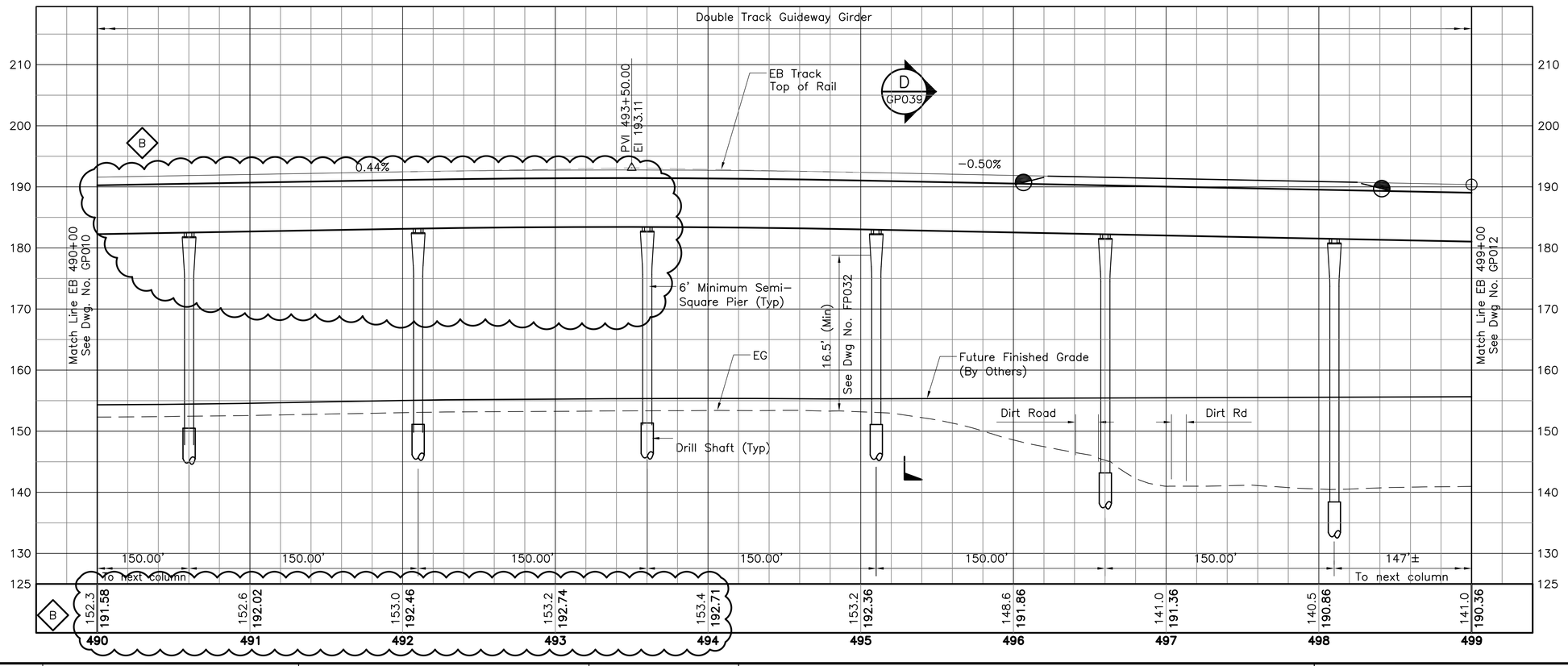

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Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 490+00 TO EB 499+00

Contract No.: DB−1200
CADD File: WF−G04−GP011
Drawing No.: GP011 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 32 of 209

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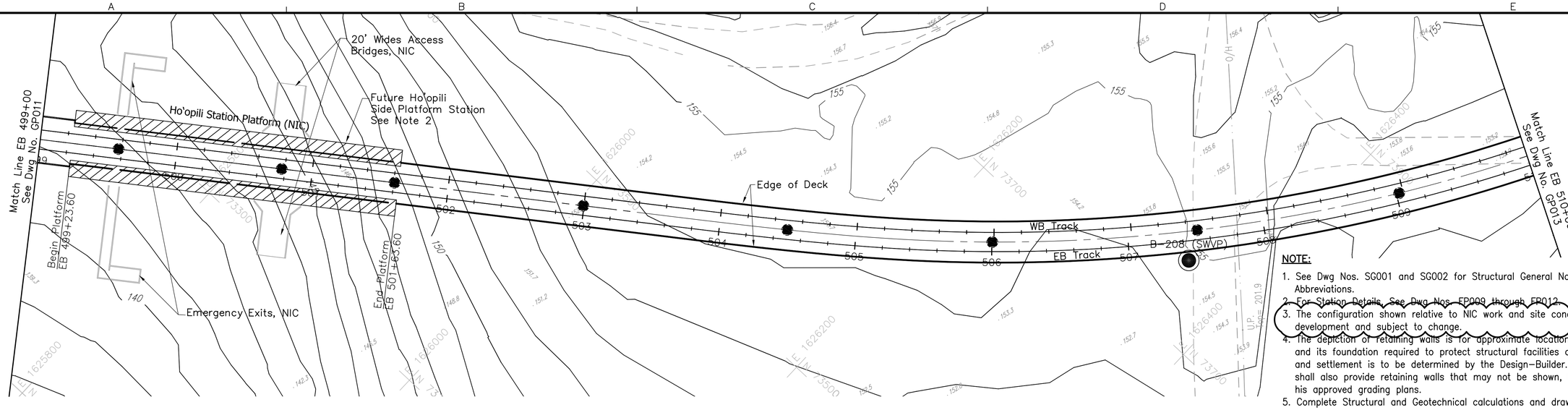

NOTE:

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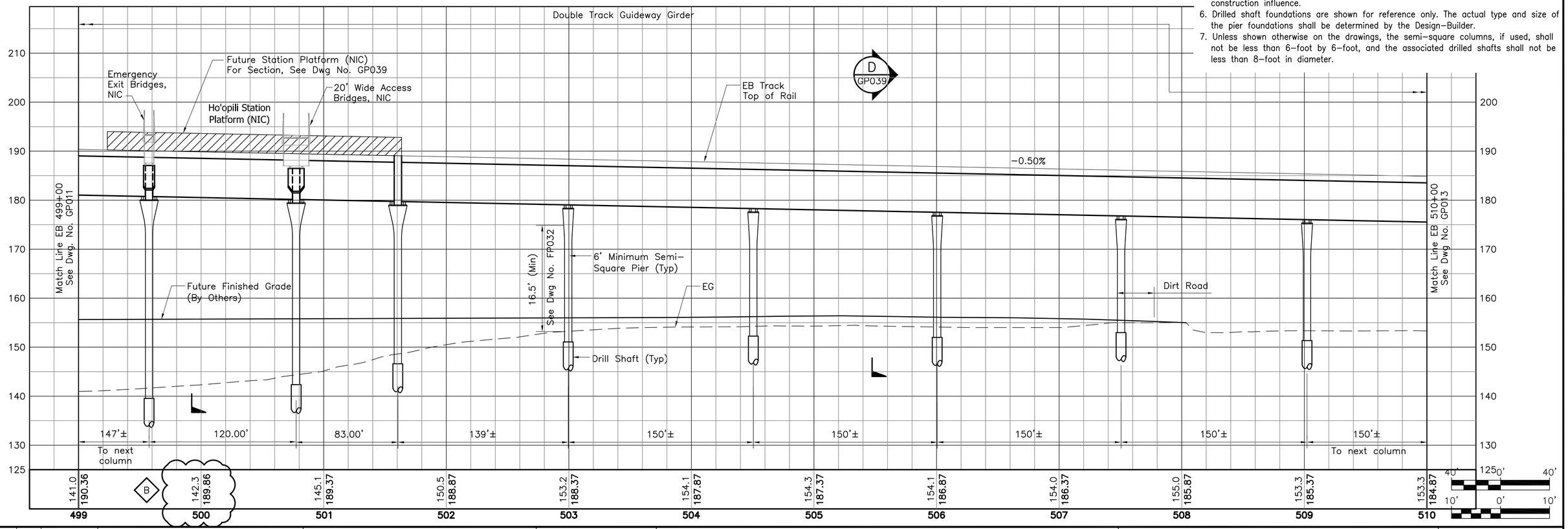

Rev	By	Date	Description
B	AB	05-22-09	Added Missing Information; Revised Note
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Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 499+00 TO EB 510+00

Contract No.: DB-1200
CADD File: WF-G04-GP012
Drawing No: GP012 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 33 of 209

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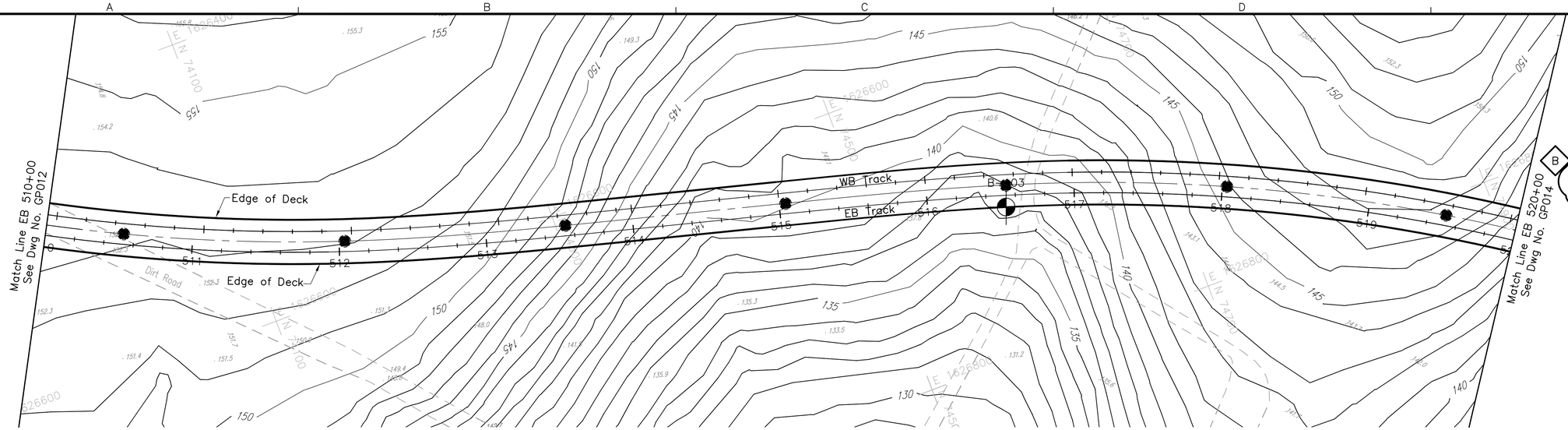

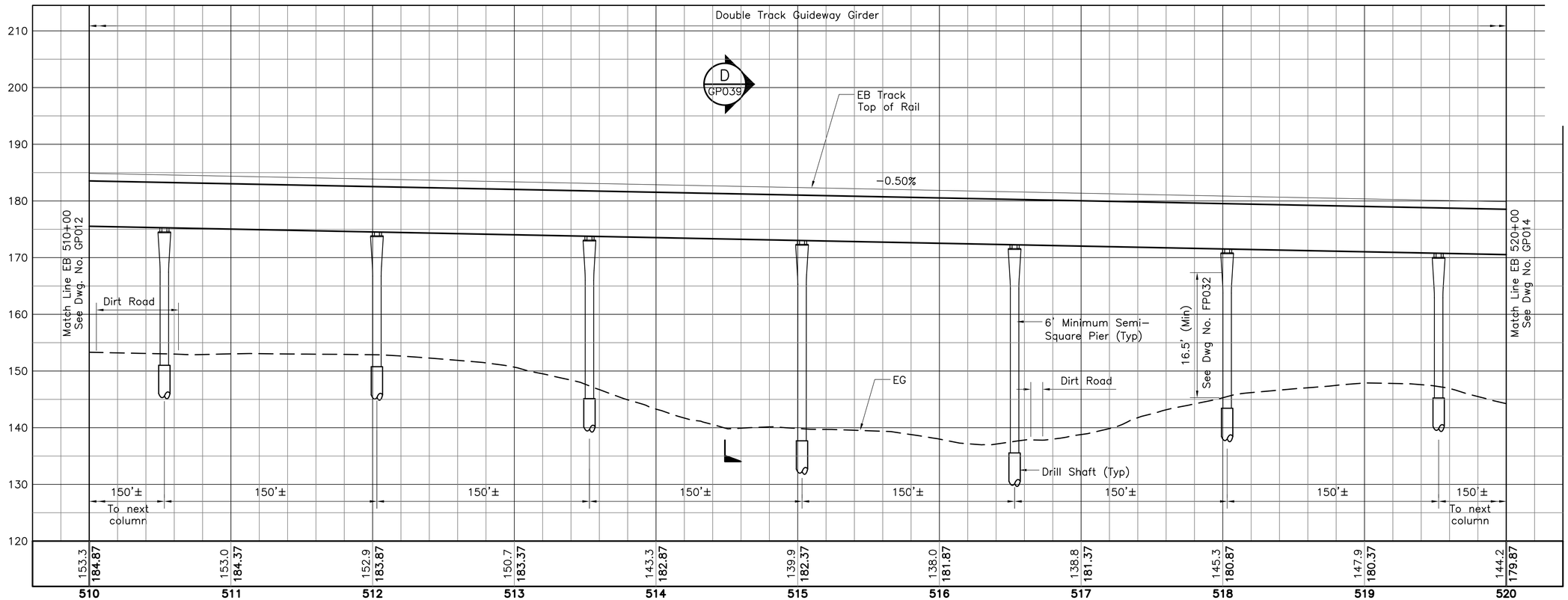

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 510+00 TO EB 520+00

Contract No.: DB-1200
CADD File: WF-G04-GP013
Drawing No: GP013 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 34 of 209

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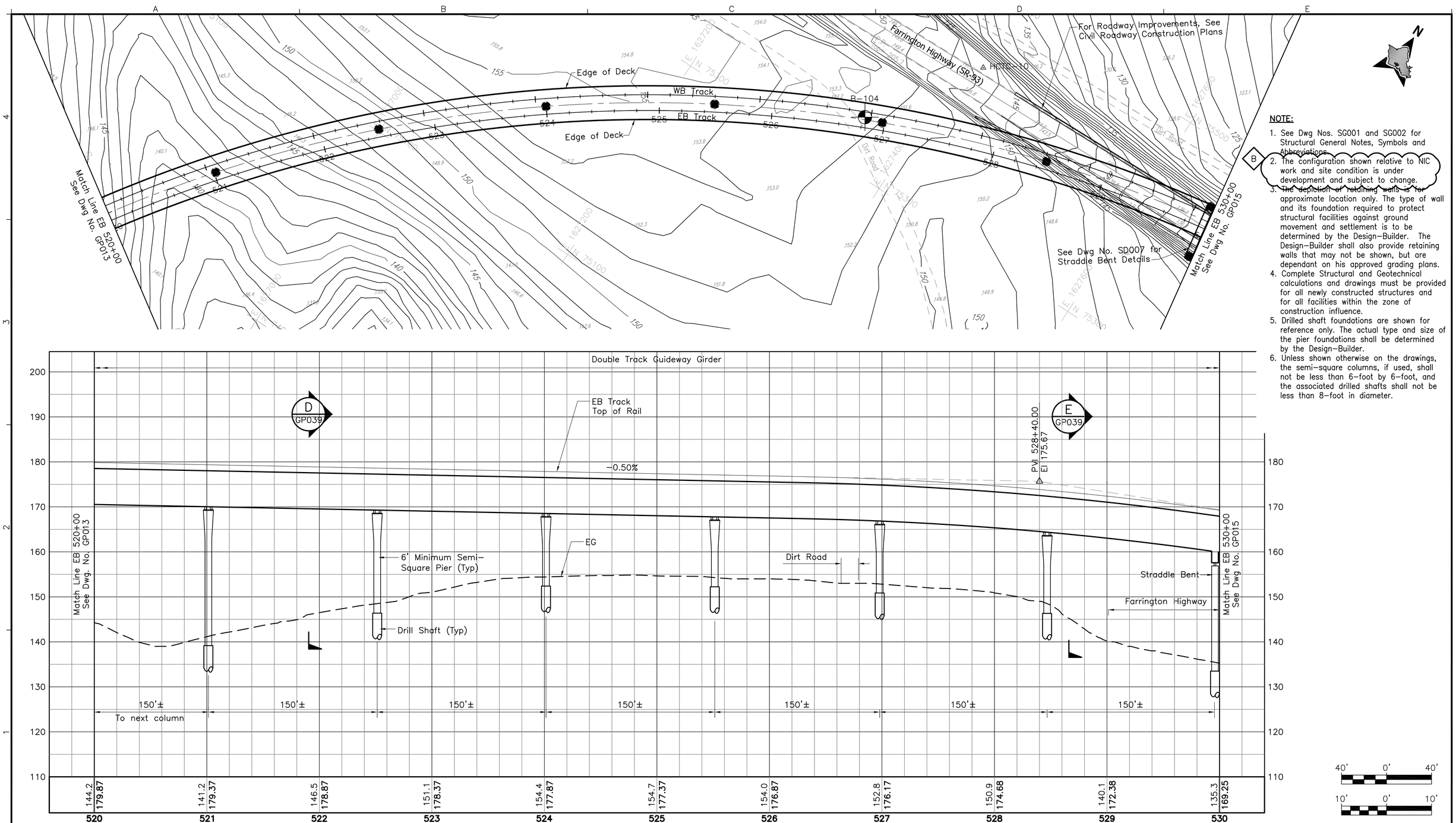

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Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 520+00 TO EB 530+00

Contract No.: DB–1200
CADD File: WF–G04–GP014
Drawing No.: GP014 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 35 of 209

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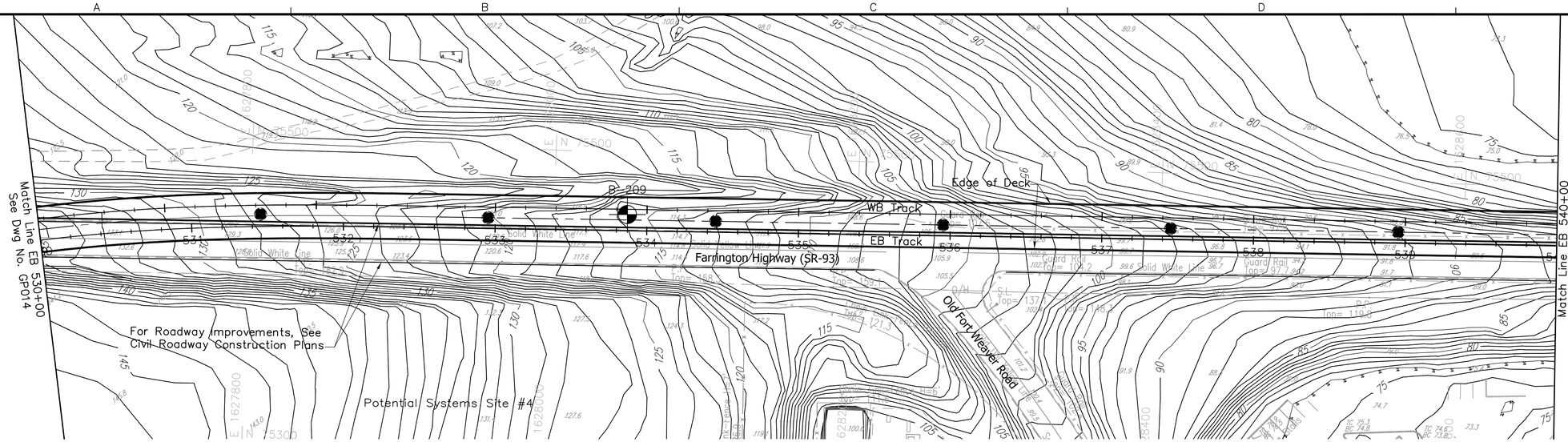

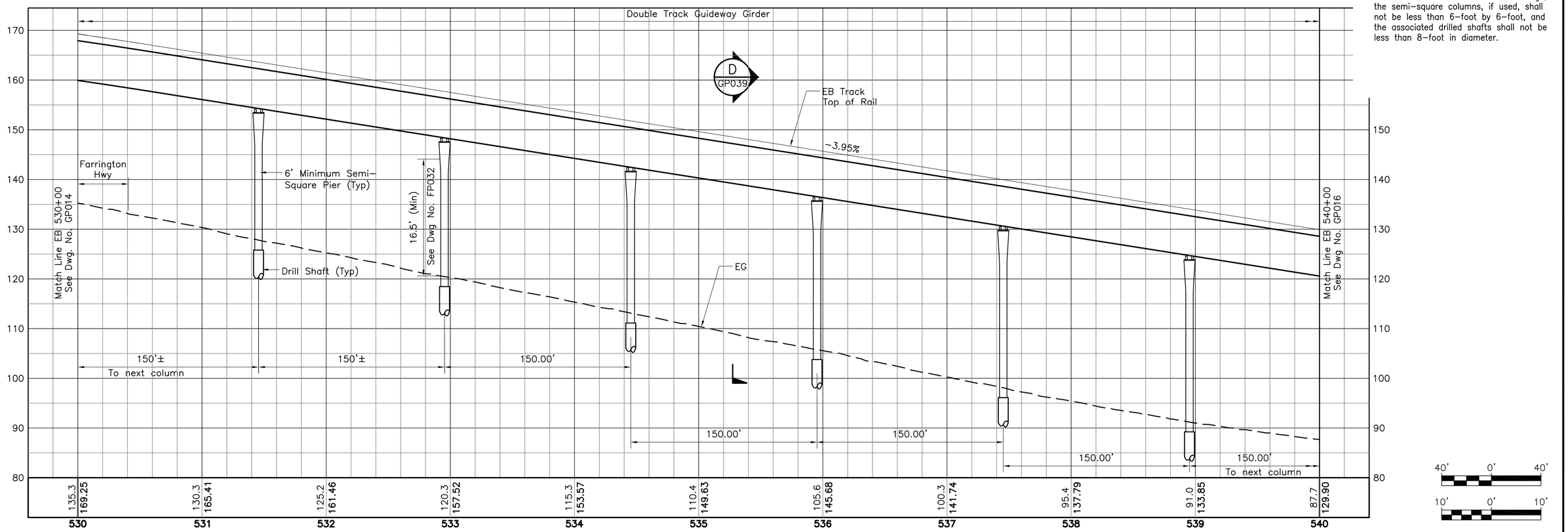

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 530+00 TO EB 540+00

Contract No.: DB-1200
CADD File: WF-G04-GP015
Drawing No.: GP015 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 36 of 209

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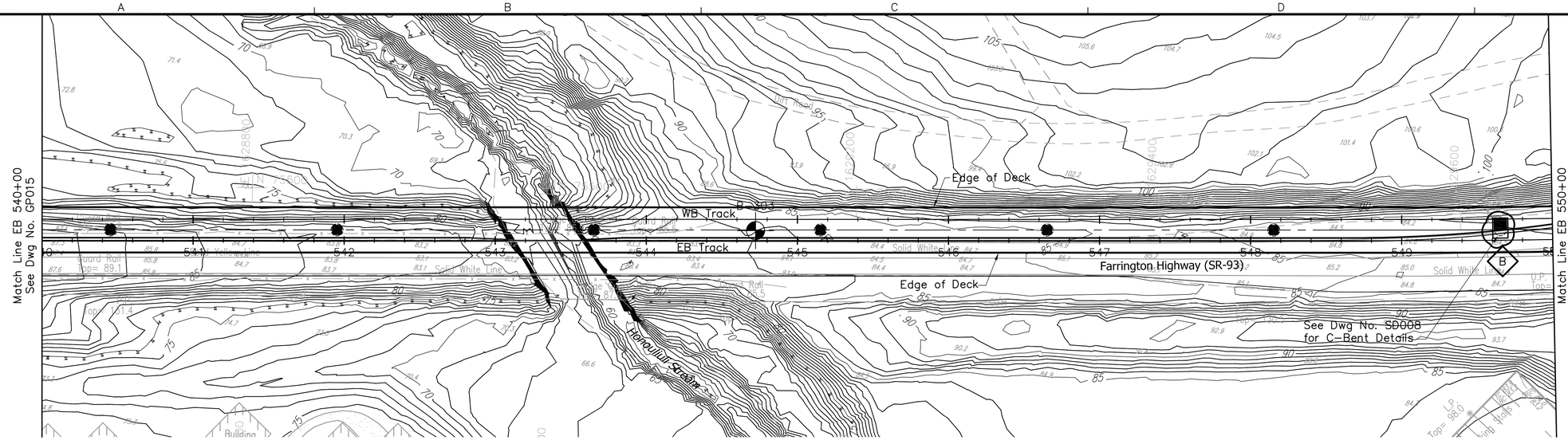

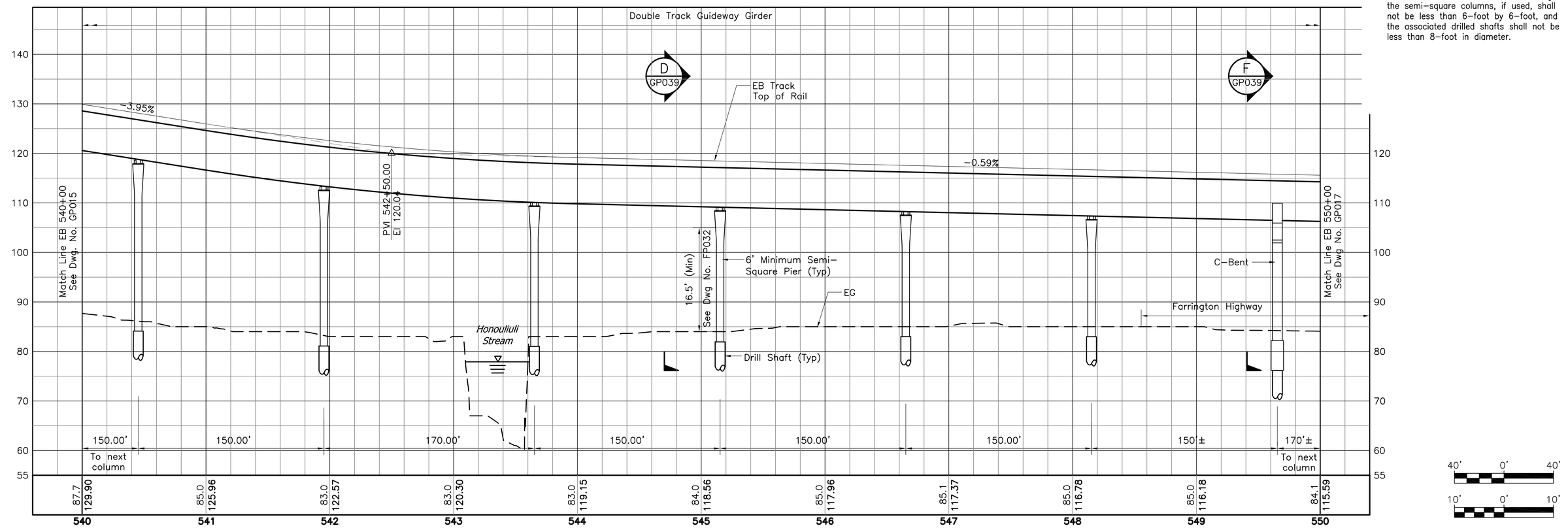

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 540+00 TO EB 550+00

Contract No.: DB–1200
CADD File: WF–G04–GP016
Drawing No: GP016 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 37 of 209

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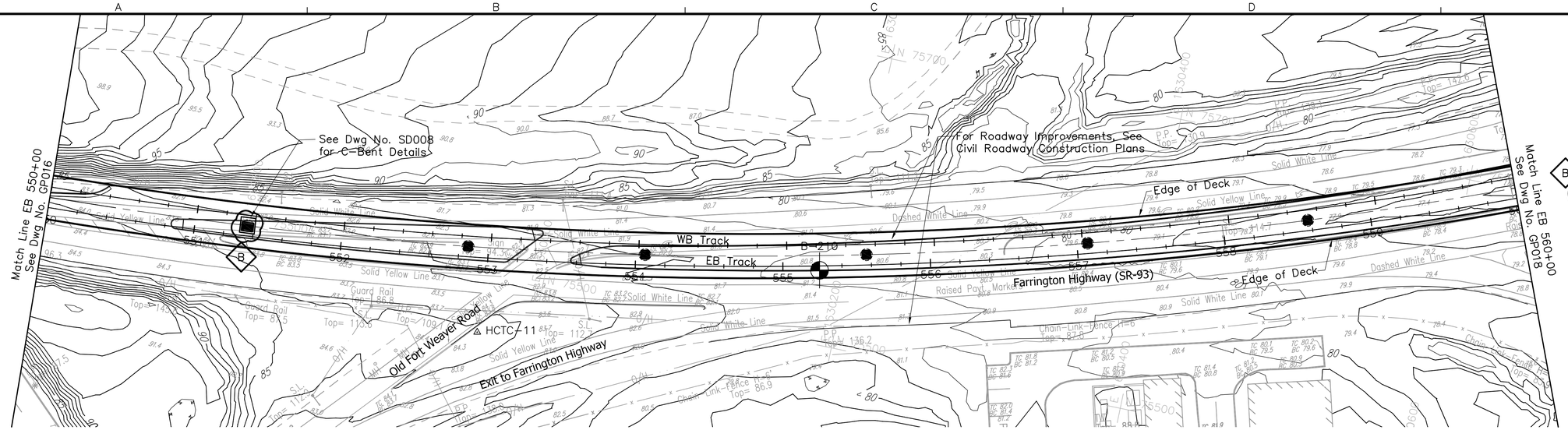

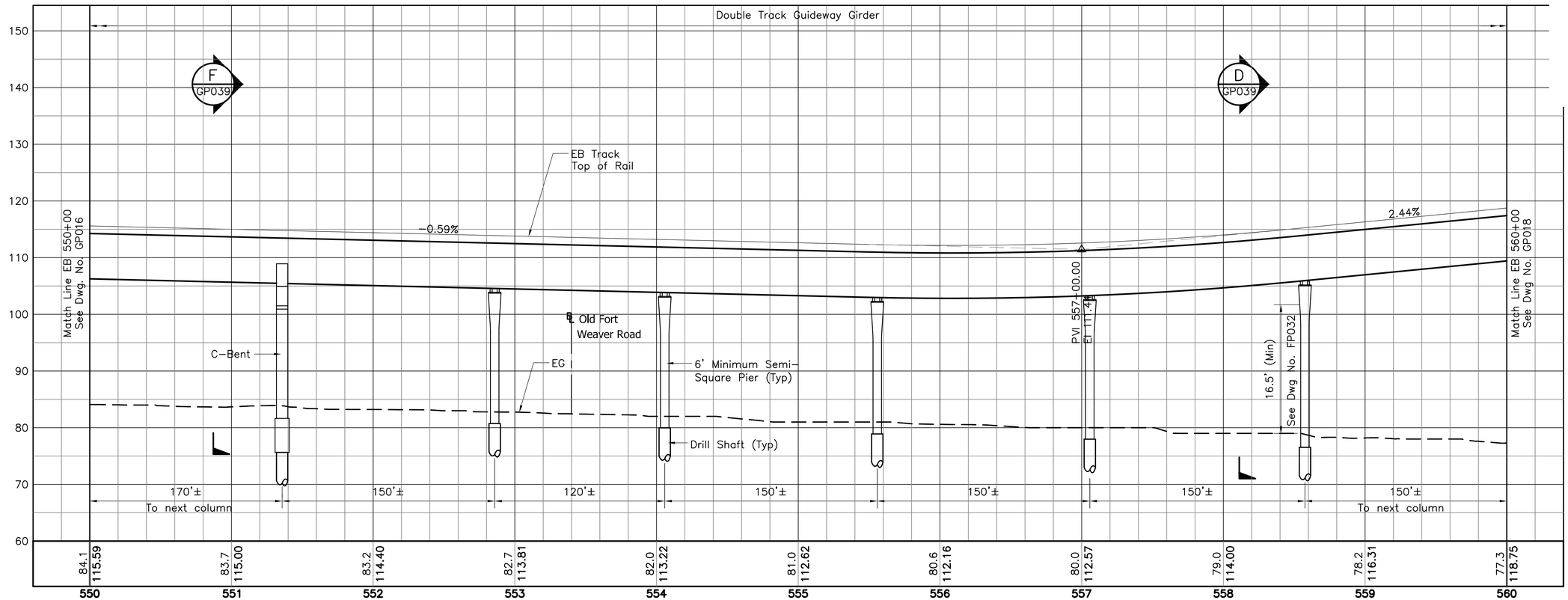

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 550+00 TO EB 560+00

Contract No.: DB-1200
CADD File: WF-G04-GP017
Drawing No: GP017 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 38 of 209

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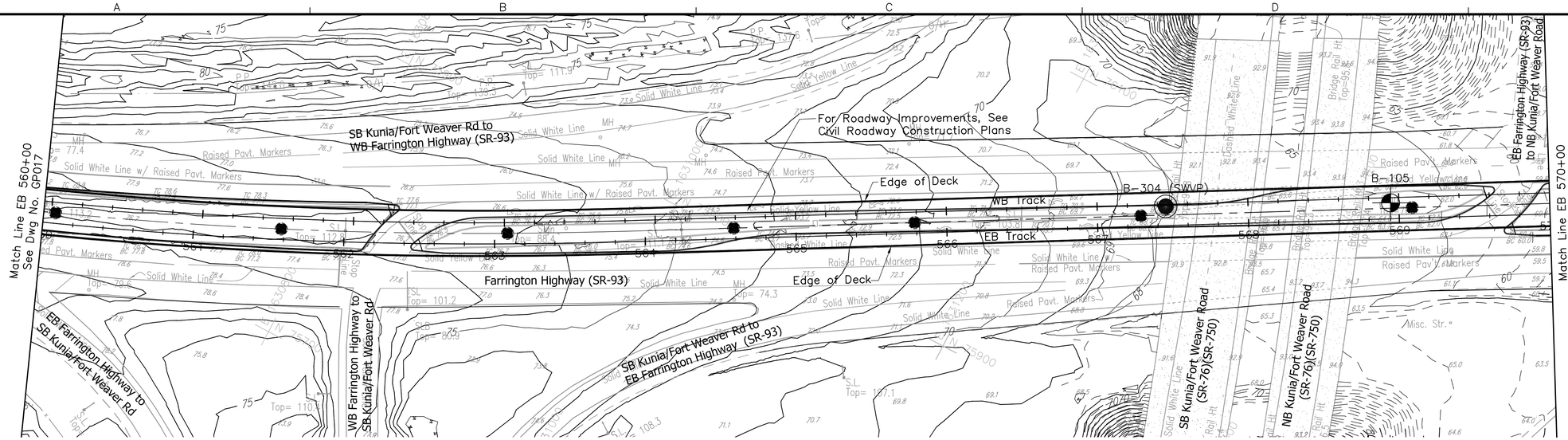

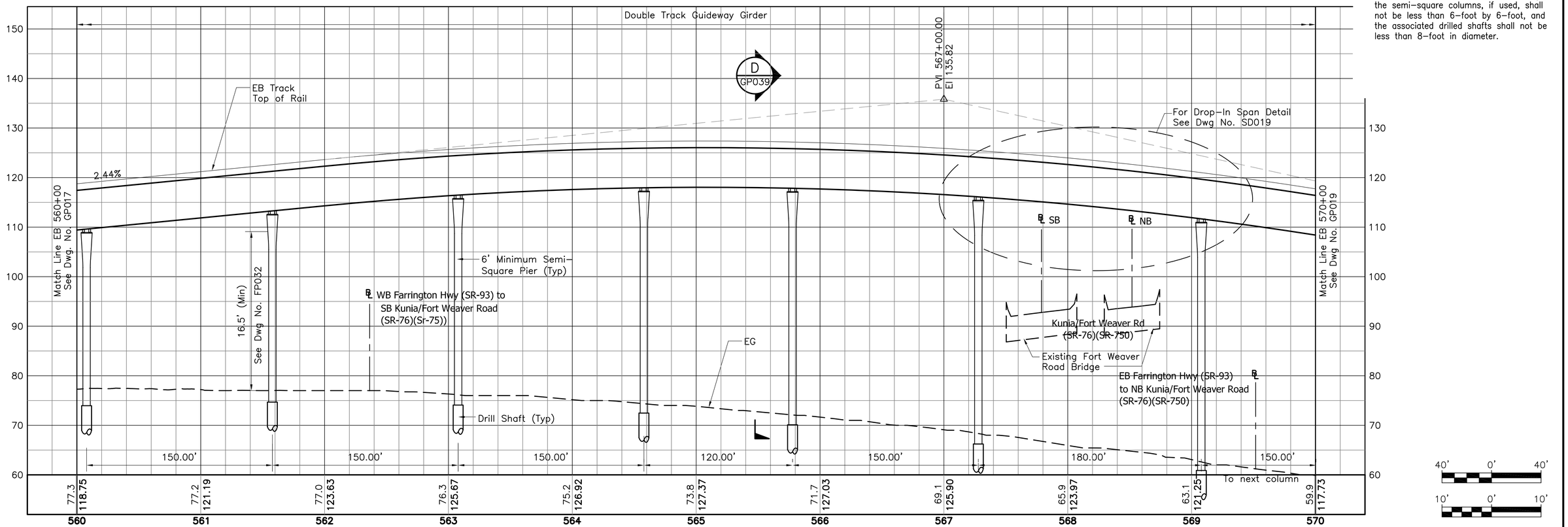

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Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

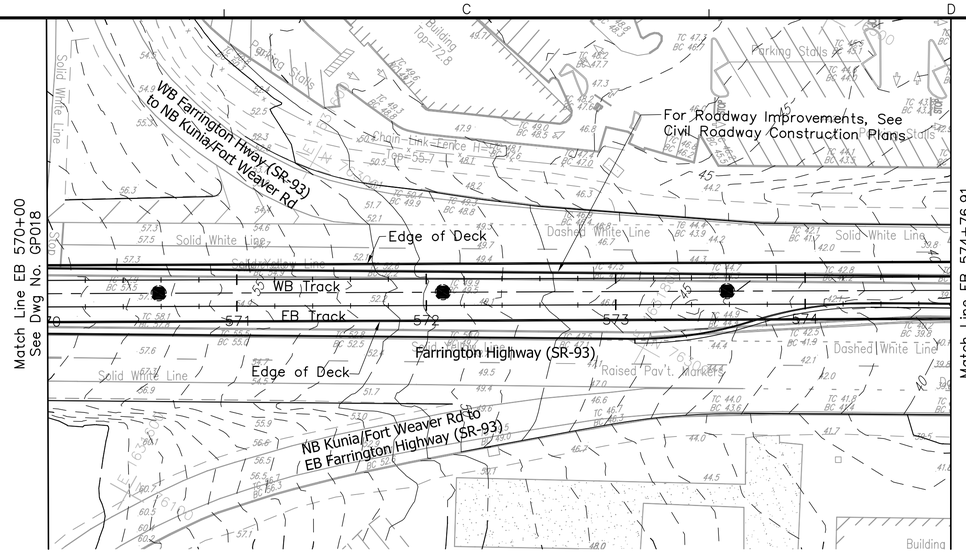
WEST O'AHU/FARRINGTON DESIGN-BUILD

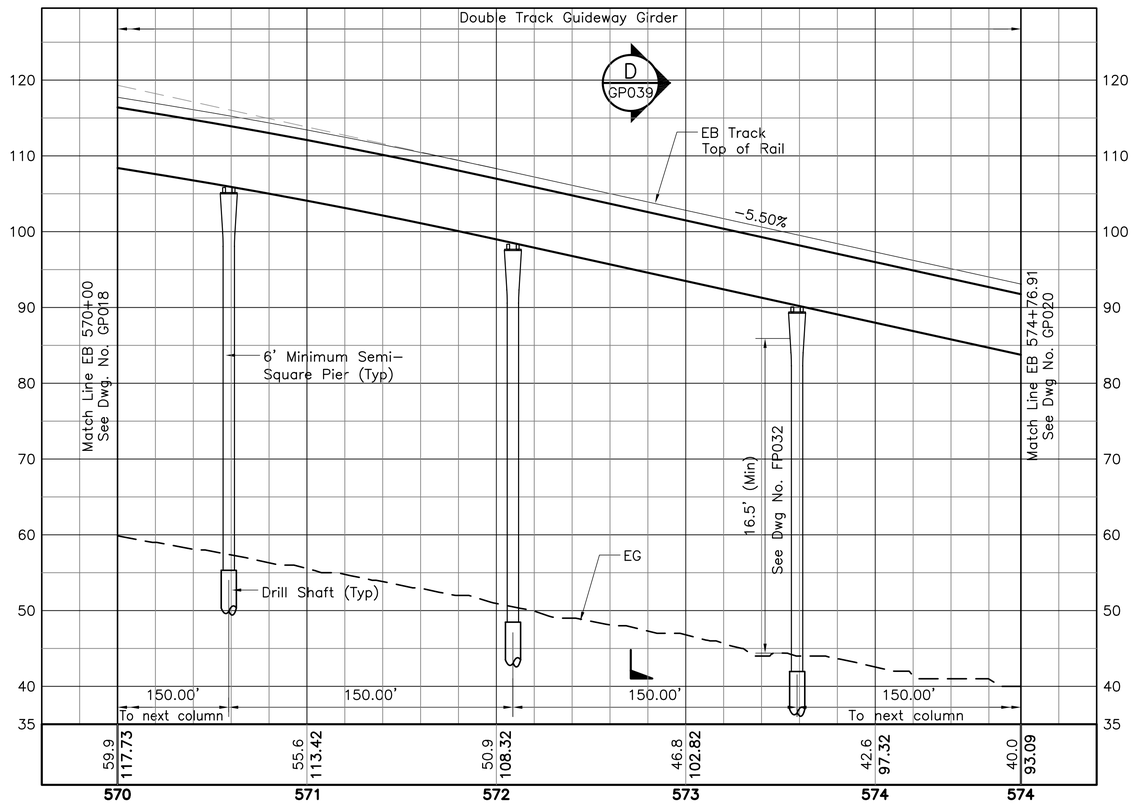
STRUCTURAL
PLAN & PROFILE

EB 560+00 TO EB 570+00

Contract No.: DB-1200
CADD File: WF-G04-GP018
Drawing No: GP018 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 39 of 209

2009-05-19 12:07 PM \\hon-t1\transit\CADD\08 Structural\W Oahu_Farrington DB\WF-G04-GP001.dwg





NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE AND SECTIONS

EB 570+00 TO EB 574+76.91

Contract No.: DB-1200
CADD File: WF-G04-GP019
Drawing No.: GP019 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 40 of 209

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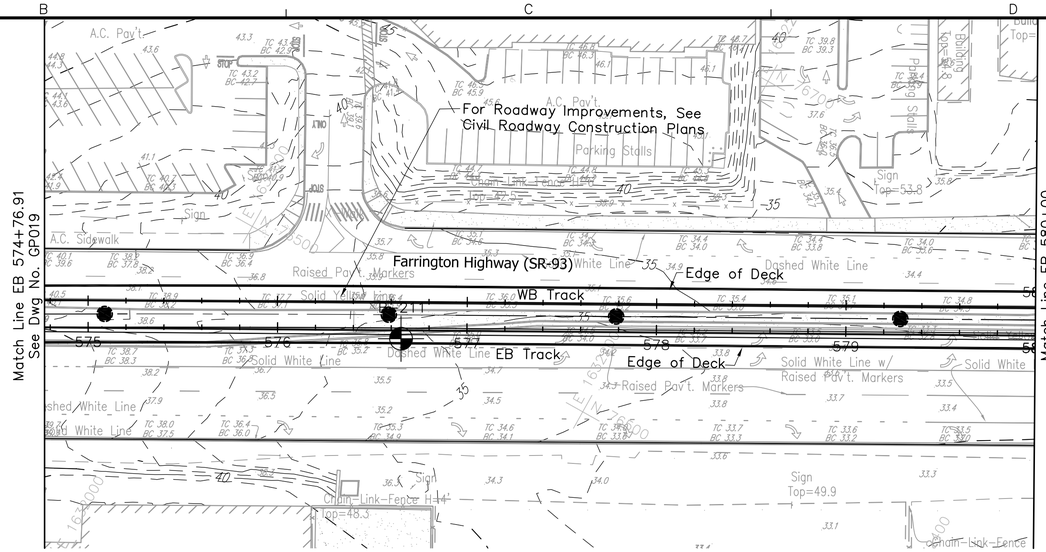

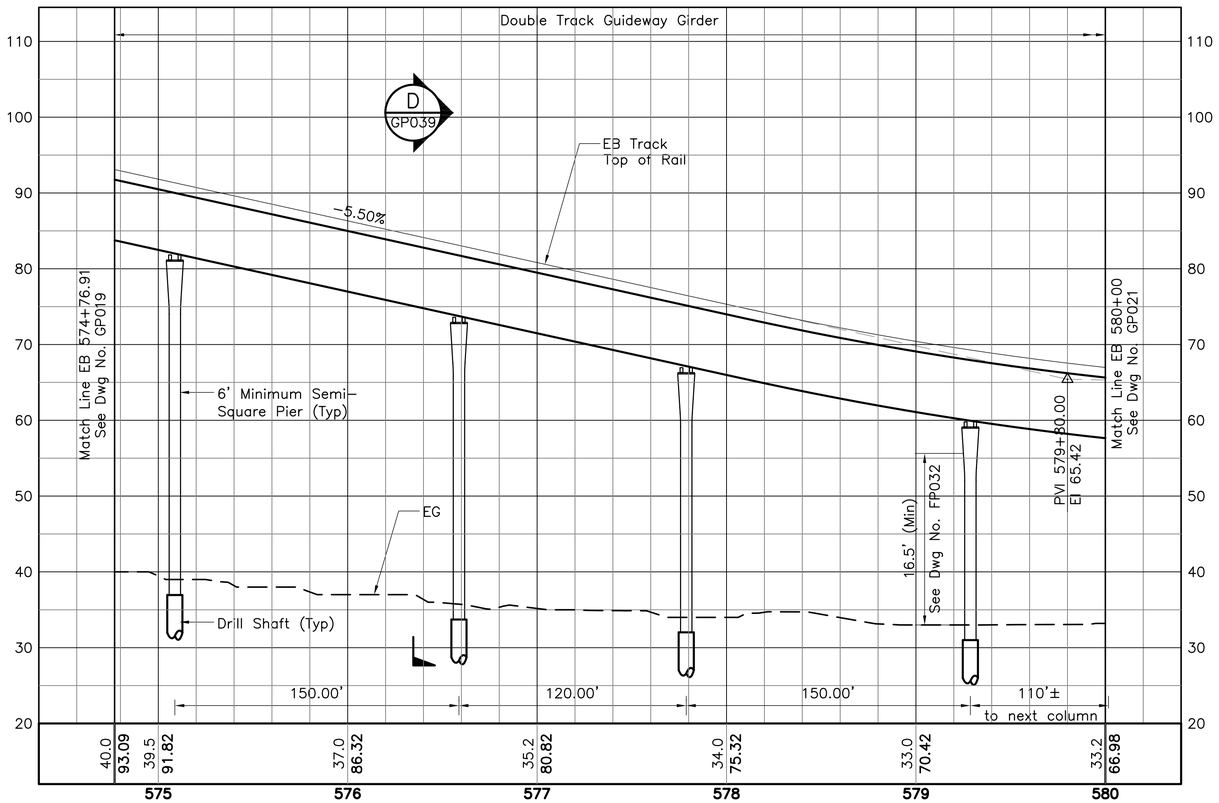

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Approved: A Borst
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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

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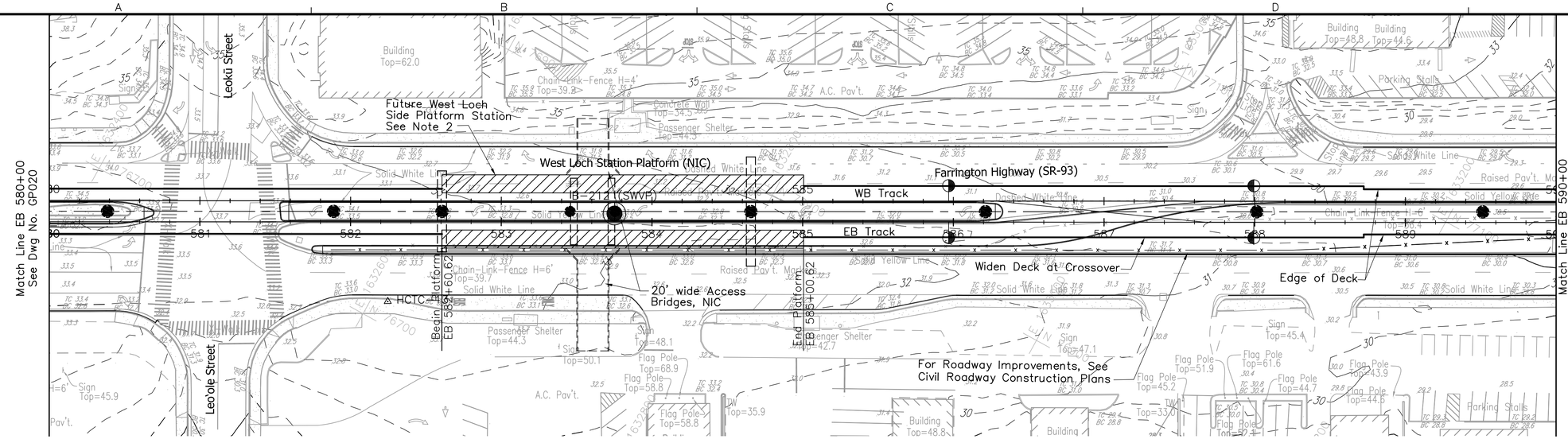
WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 574+76.91 TO EB 580+00

Contract No.: DB–1200
CADD File: WF–G04–GP020
Drawing No: GP020 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 41 of 209



NOTE:

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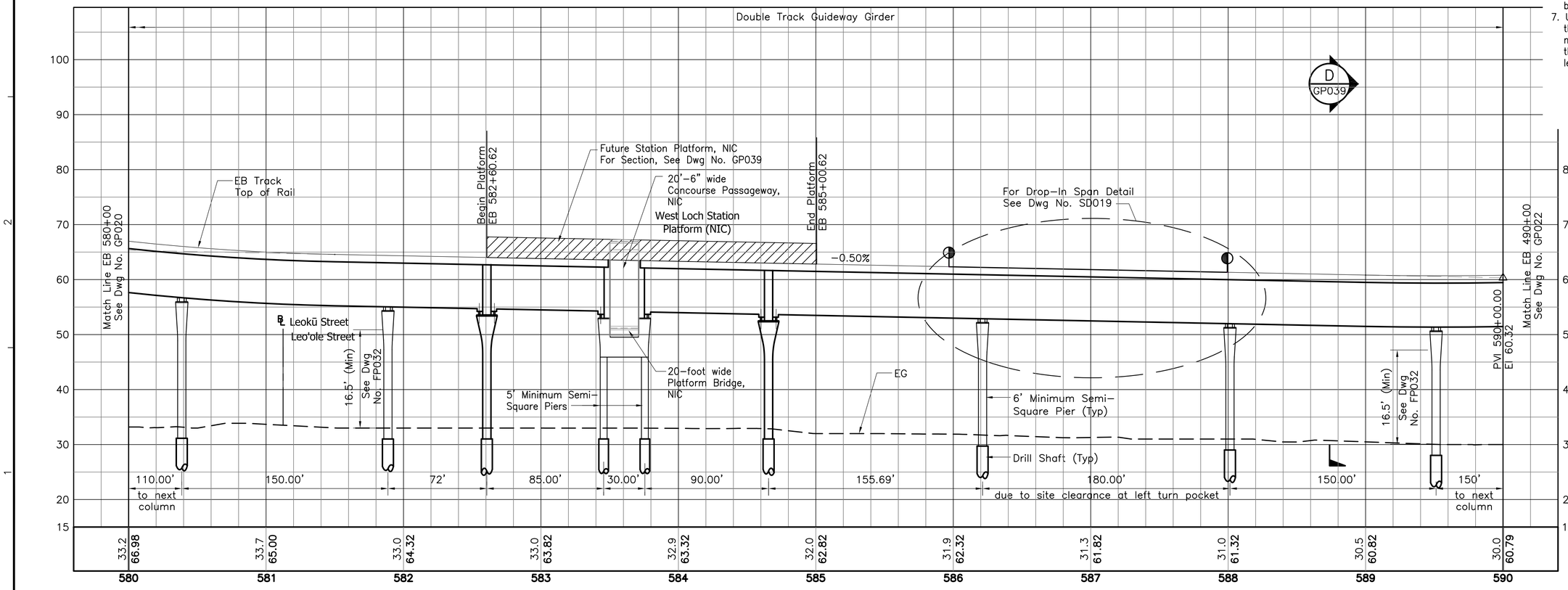

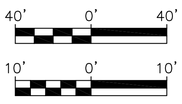

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Approved: A Borst
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HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 580+00 TO EB 590+00

Contract No.: DB-1200
CADD File: WF-G04-GP021
Drawing No: GP021 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 42 of 209

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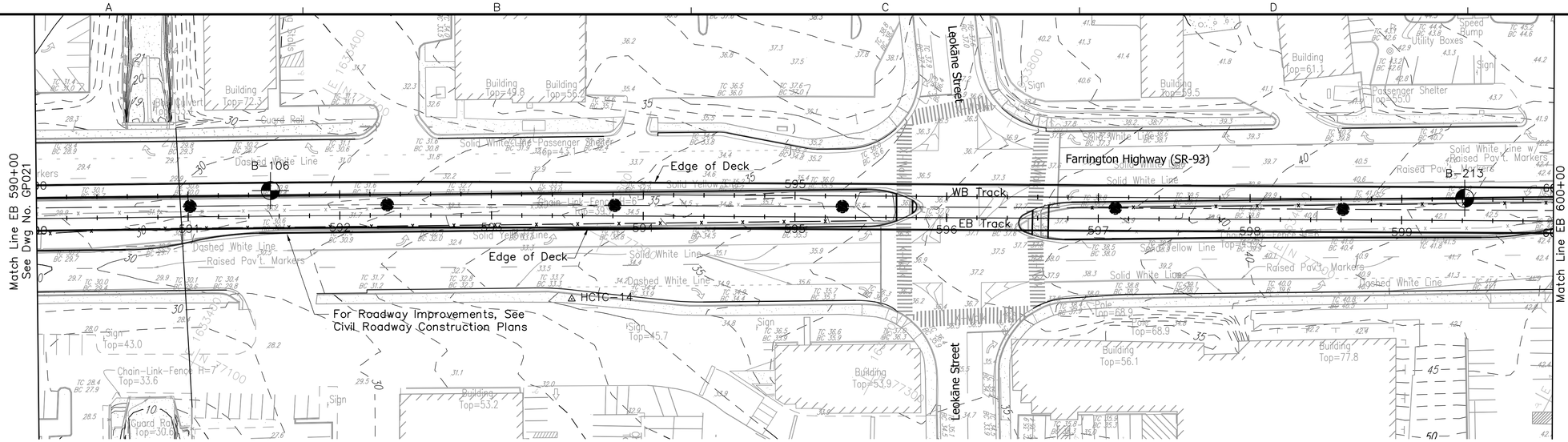
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See Dwg No. GP021
Match Line EB 600+00
See Dwg No. GP023
B-106
B-213
Edge of Deck
Edge of Deck
WB Track
EB Track
Leokāne Street
Leokāne Street
Farrington Highway (SR-93)
For Roadway Improvements, See
Civil Roadway Construction Plans
HCTC-14
Dashed White Line
Raised Pavt. Markers
Solid White Line
Solid Yellow Line
Chain-Link-Fence H=7'
Guard Rail
Sign
Top=43.0
Sign
Top=45.7
Building
Top=72.3
Building
Top=49.8
Building
Top=56.2
Building
Top=53.2
Building
Top=53.9
Building
Top=56.1
Building
Top=77.8
Building
Top=59.5
Building
Top=61.1
Pole
Top=68.9
Pole
Top=68.9
Passenger Shelter
Top=65.0
Utility Boxes
Speed Bump
Solid White Line w/
Raised Pavt. Markers
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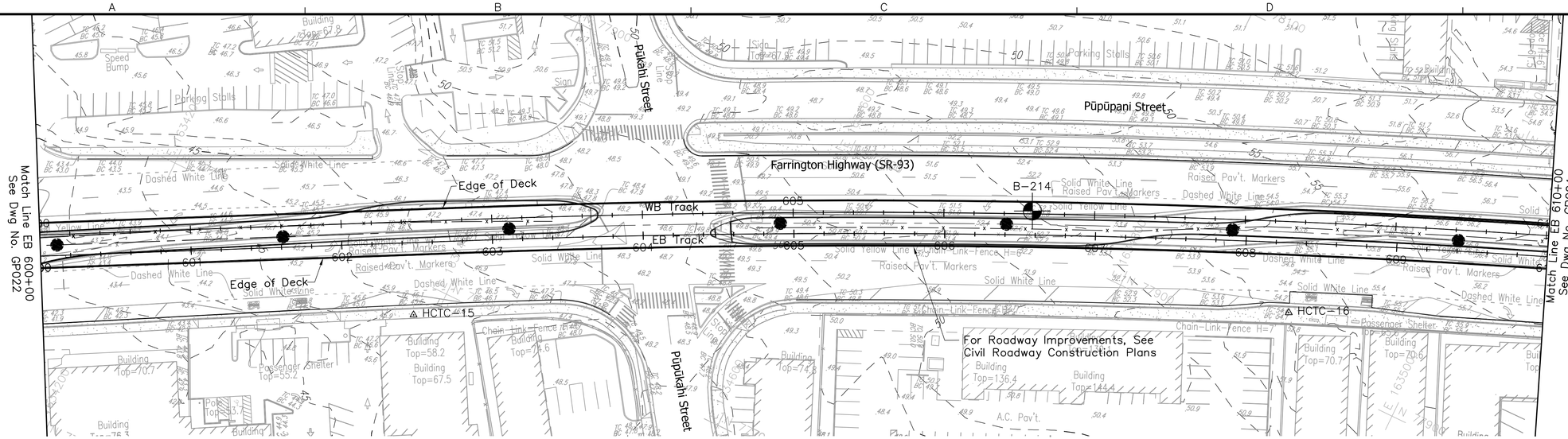
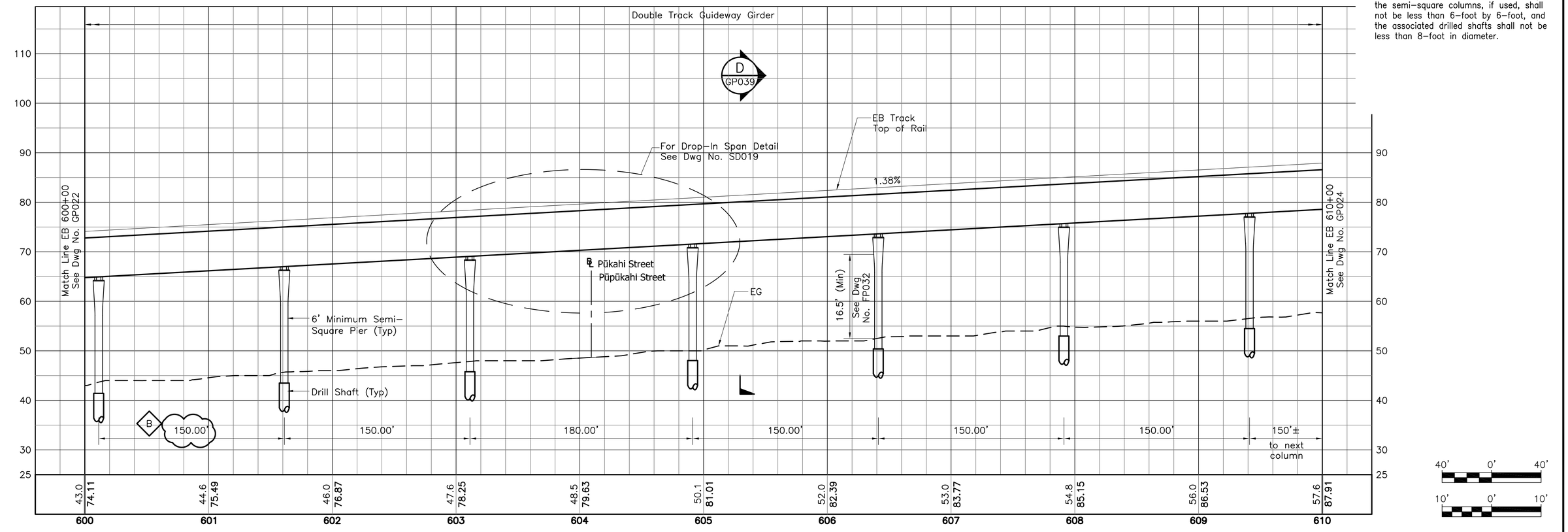
Raised Pavt. Markers
Dashed White Line
Solid White Line
Solid White Line
Solid





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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Revised Notes; Rev ised Dimensions
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813
Subconsultant:

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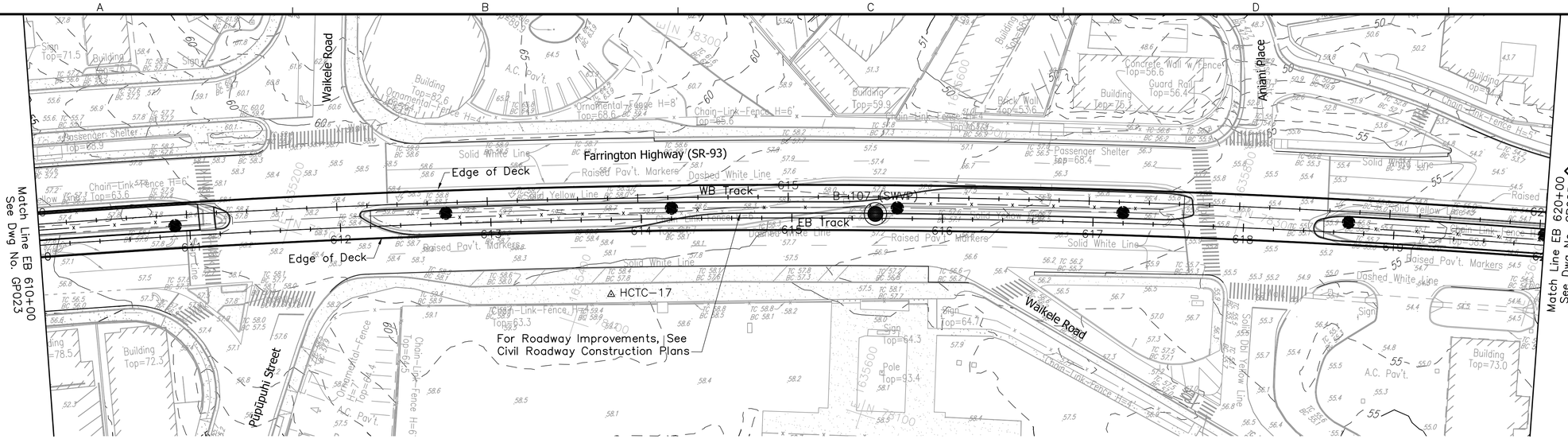
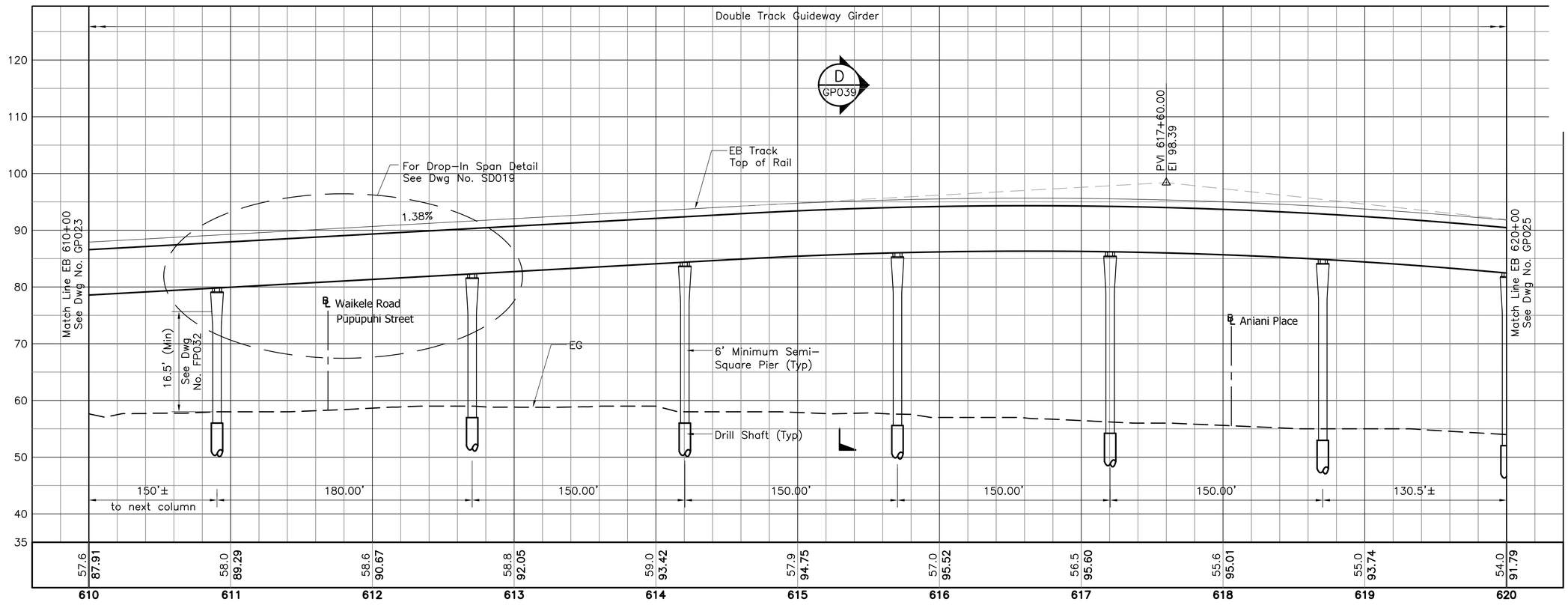
WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 600+00 TO EB 610+00

Contract No.: DB-1200
CADD File: WF-G04-GP023
Drawing No: GP023 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 44 of 209





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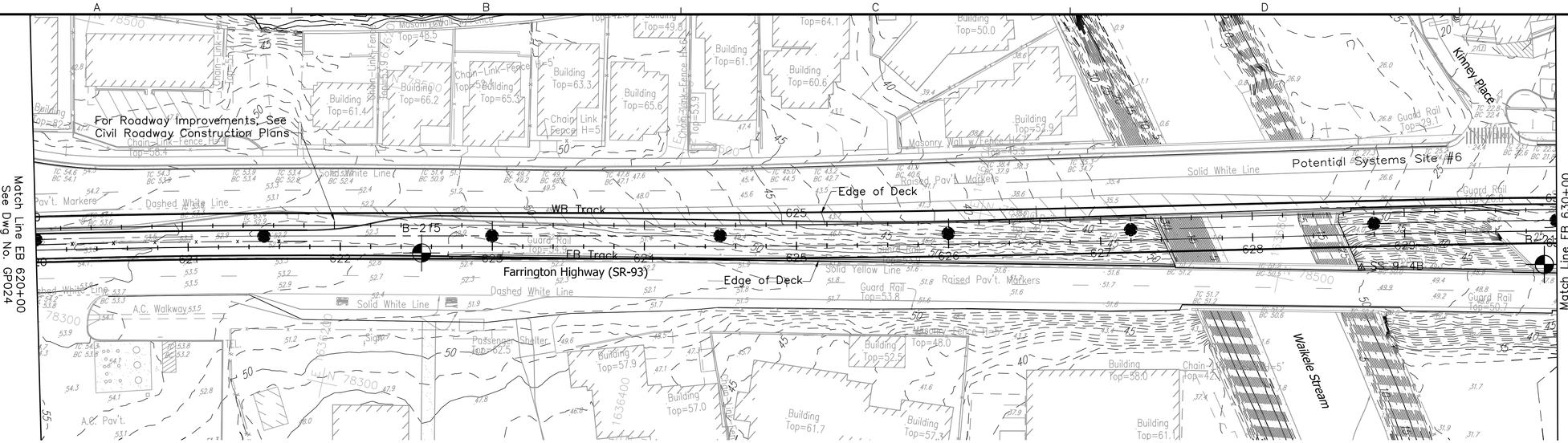
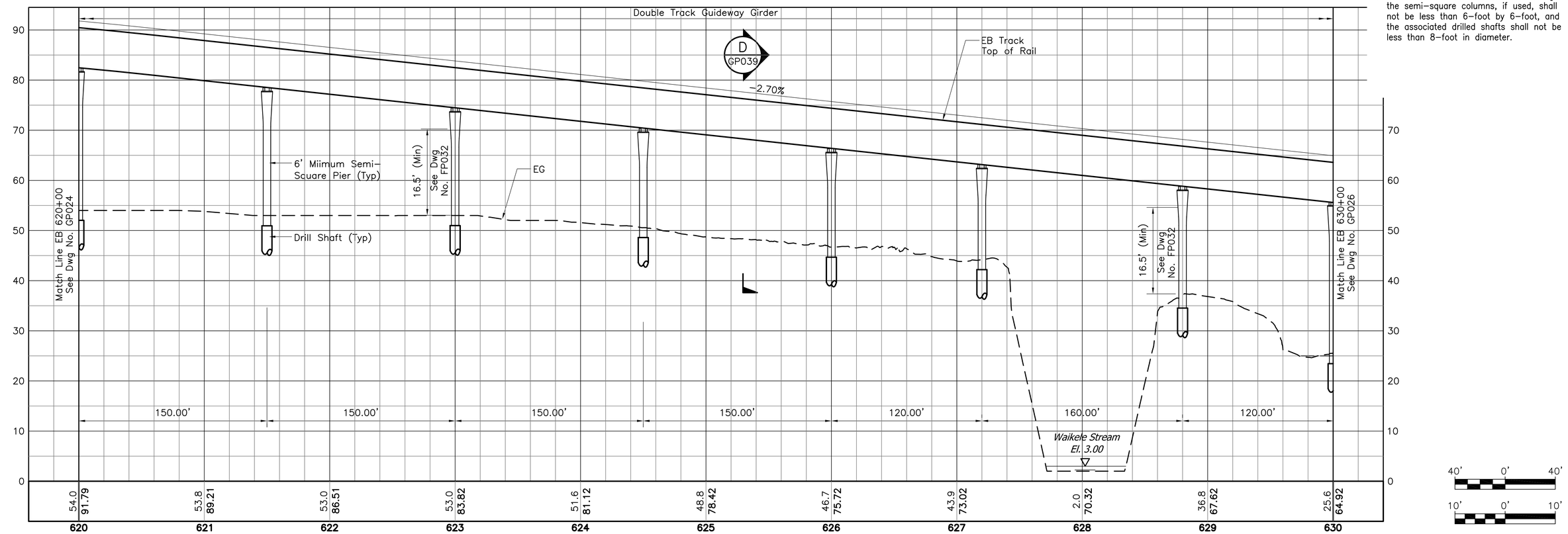
WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 610+00 TO EB 620+00

Contract No.: DB-1200
CADD File: WF-G04-GP024
Drawing No: GP024 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 45 of 209





N

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CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 620+00 TO EB 630+00

Contract No.: DB-1200
CADD File: WF-G04-GP025
Drawing No.: GP025 Rev.: B
Scale: 1"=40' H, 1"=10' V
Page No.: 46 of 209

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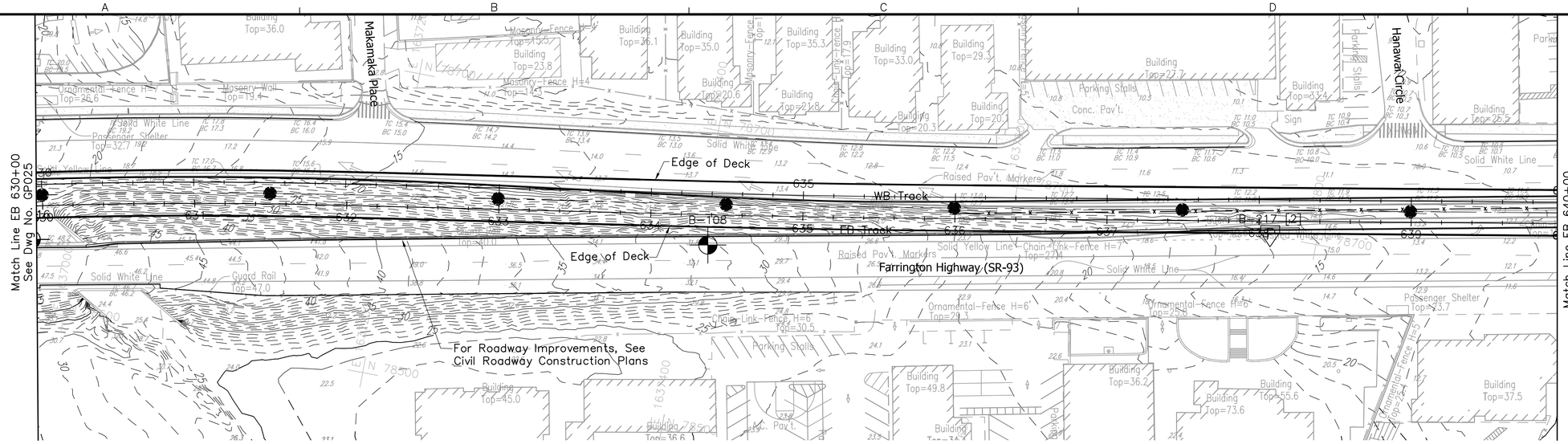

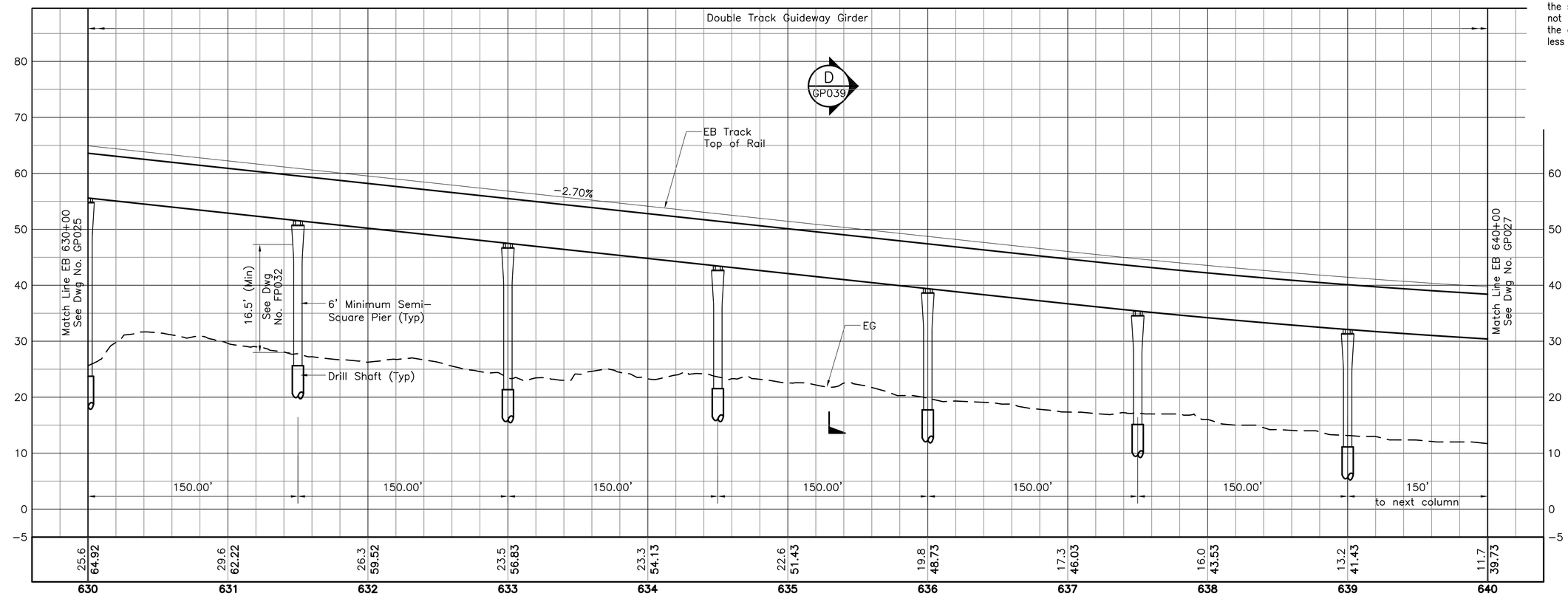

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 630+00 TO EB 640+00

Contract No.: DB-1200
CADD File: WF-G04-GP026
Drawing No.: GP026 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 47 of 209

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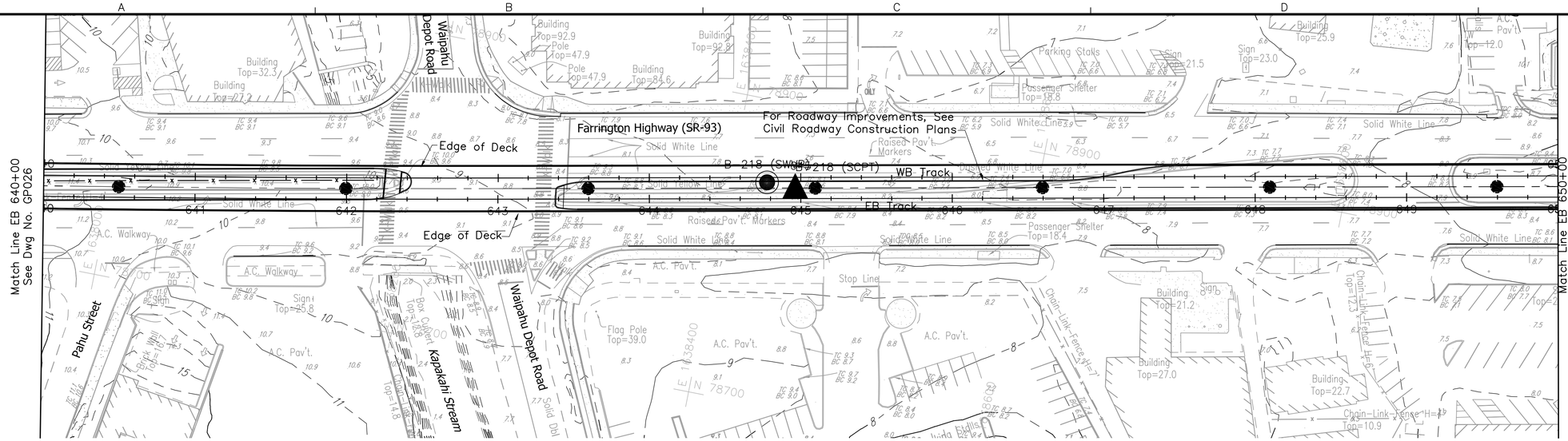

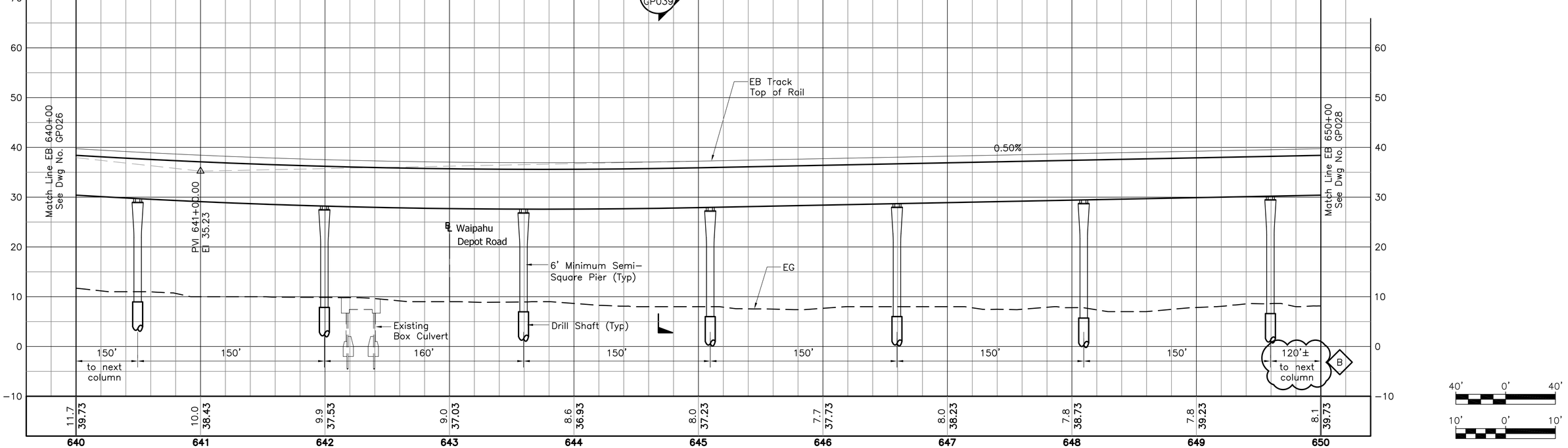

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Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 640+00 TO EB 650+00

Contract No.: DB–1200
CADD File: WF–G04–GP027
Drawing No.: GP027 Rev.: B
Scale: 1"=40' H, 1"=10' V
Page No. 48 of 209

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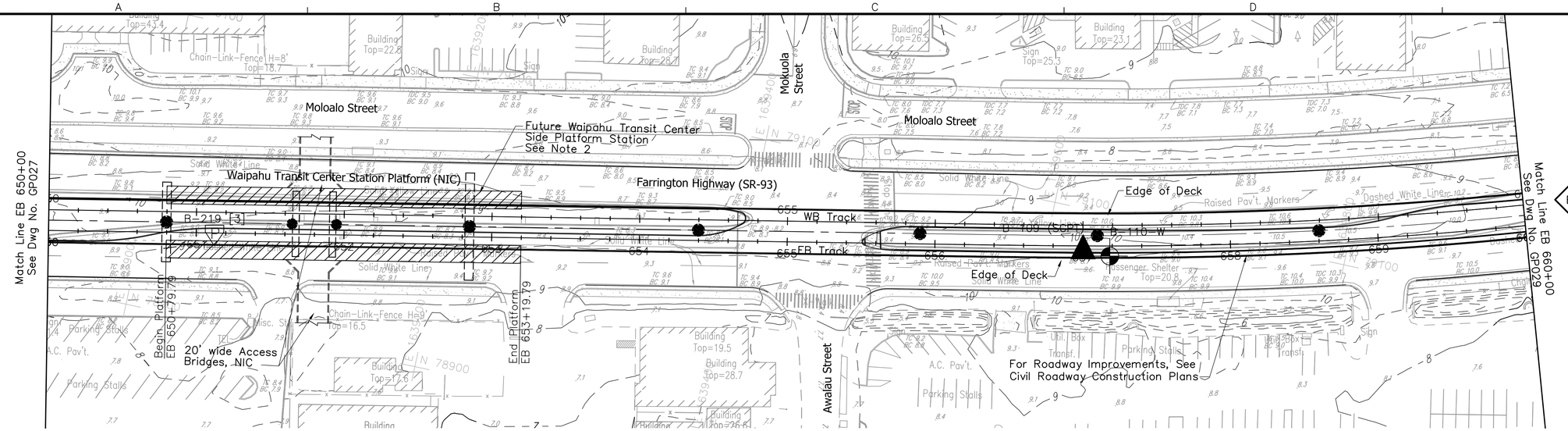

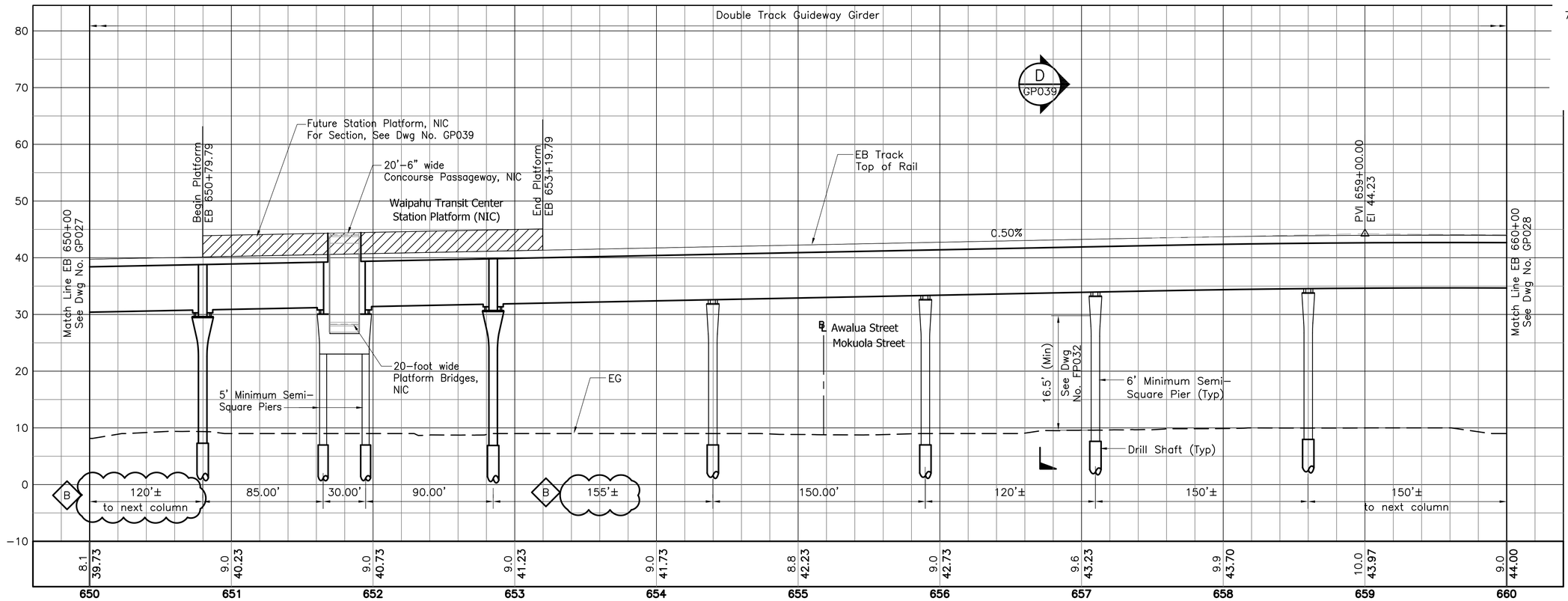

N

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Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 650+00 TO EB 660+00

Contract No.: DB–1200
CADD File: WF–G04–GP028
Drawing No.: GP028 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 49 of 209

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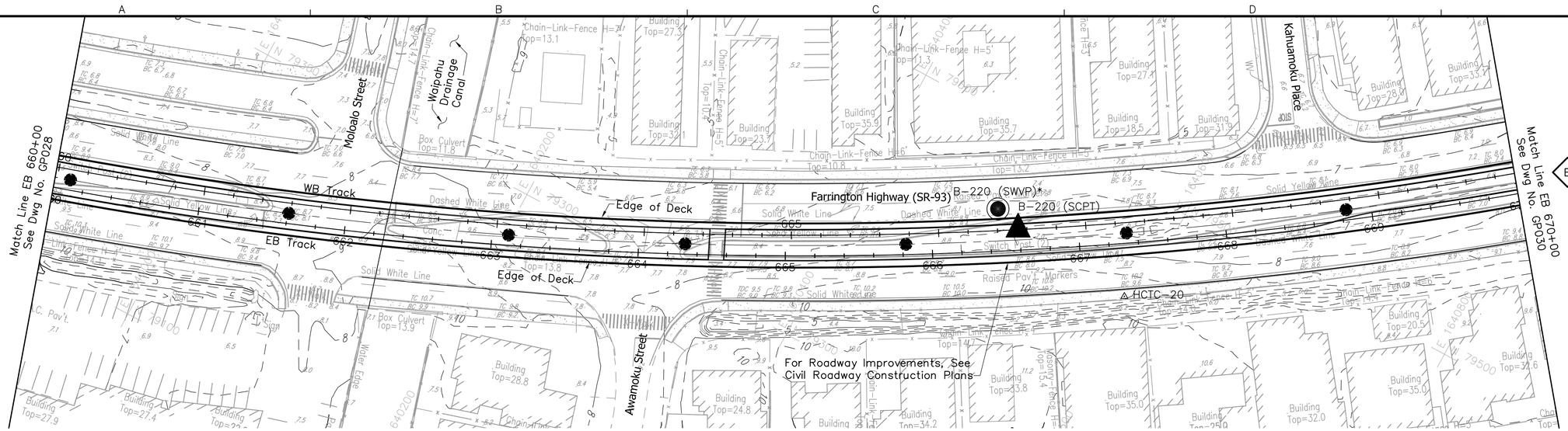

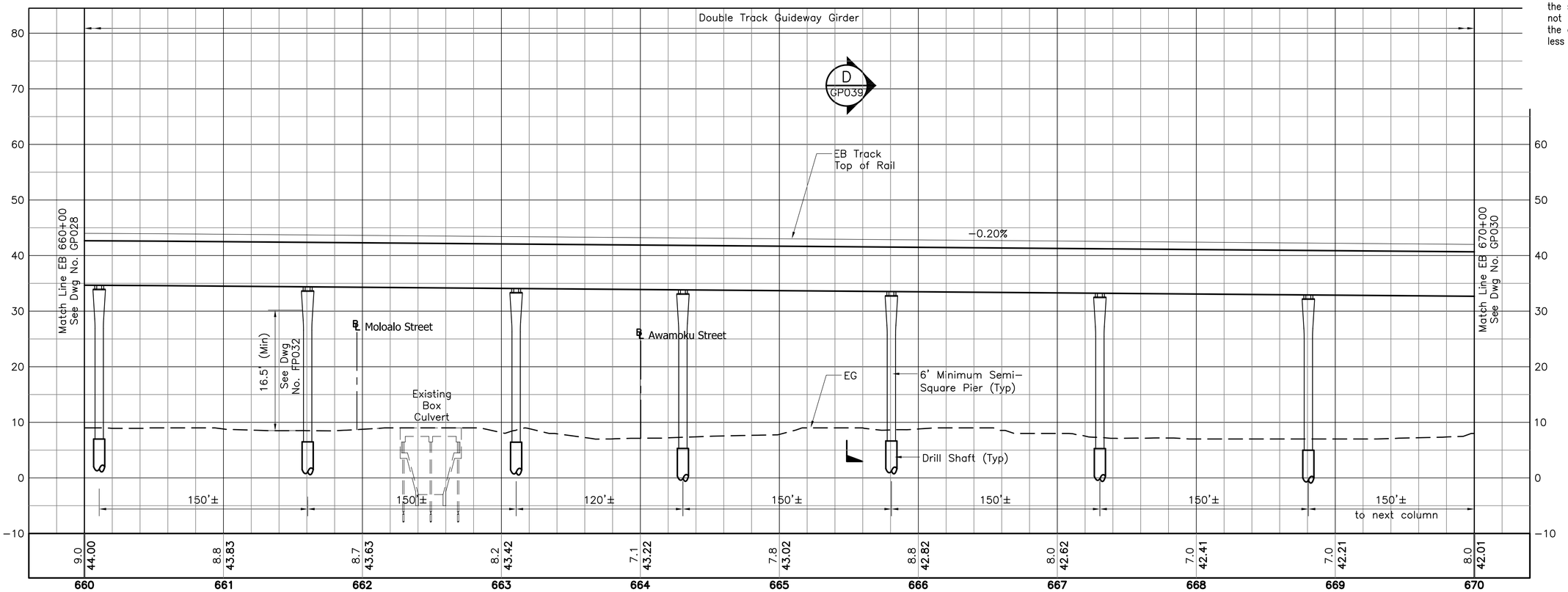

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. The configuration shown relative to NIC work and site condition is under development and subject to change.
3. The depiction of retaining walls is for approximate location only. The type of wall and its foundation required to protect structural facilities against ground movement and settlement is to be determined by the Design-Builder. The Design-Builder shall also provide retaining walls that may not be shown, but are dependant on his approved grading plans.
4. Complete Structural and Geotechnical calculations and drawings must be provided for all newly constructed structures and for all facilities within the zone of construction influence.
5. Drilled shaft foundations are shown for reference only. The actual type and size of the pier foundations shall be determined by the Design-Builder.
6. Unless shown otherwise on the drawings, the semi-square columns, if used, shall not be less than 6-foot by 6-foot, and the associated drilled shafts shall not be less than 8-foot in diameter.

Rev	By	Date	Description
B	AB	05-22-09	Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 660+00 TO EB 670+00

Contract No.: DB-1200
CADD File: WF-G04-GP029
Drawing No.: GP029 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 50 of 209

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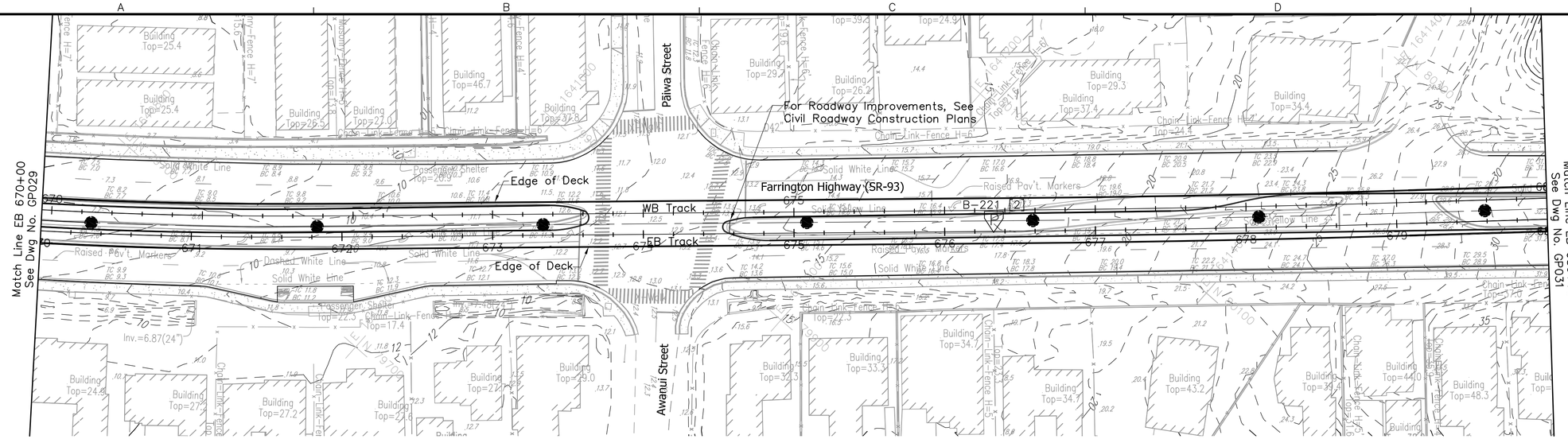

NOTE:

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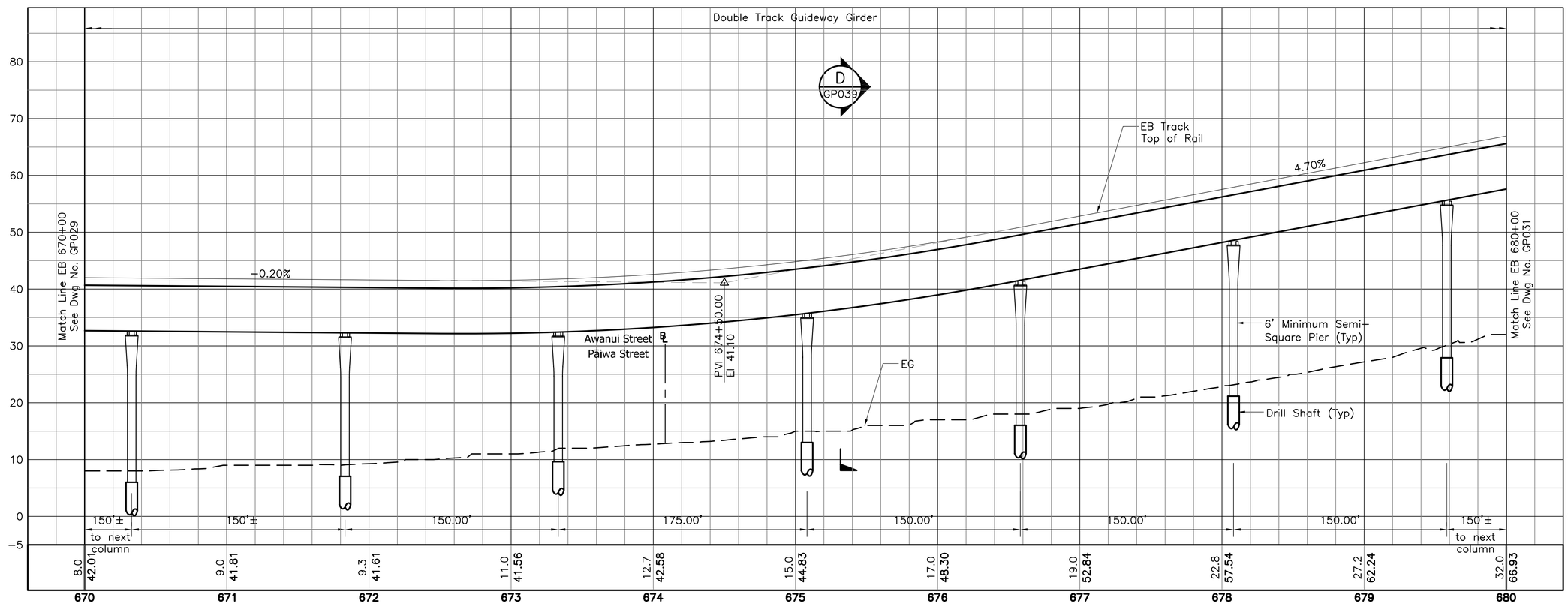

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05–22–09	Revised Notes
A	AB	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 670+00 TO EB 680+00

Contract No.: DB–1200
CADD File: WF–G04–GP030
Drawing No.: GP030 Rev.: B
Scale: 1"=40' H, 1"=10' V
Page No.: 51 of 209

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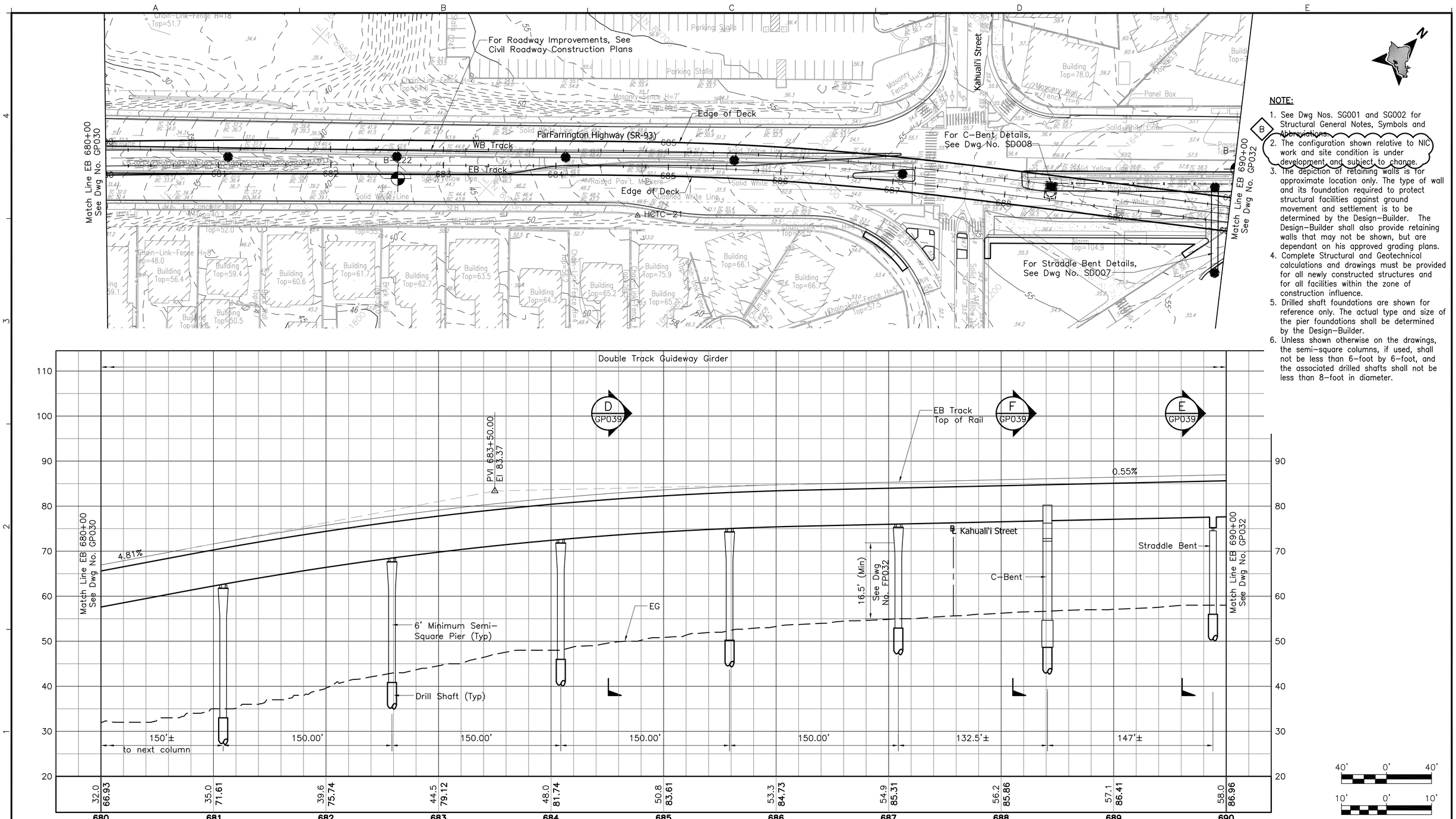

NOTE:

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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Revised Notes
A	AB	04-03-09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 680+00 TO EB 690+00

Contract No.: DB-1200
CADD File: WF-G04-GP031
Drawing No: GP031 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 52 of 209

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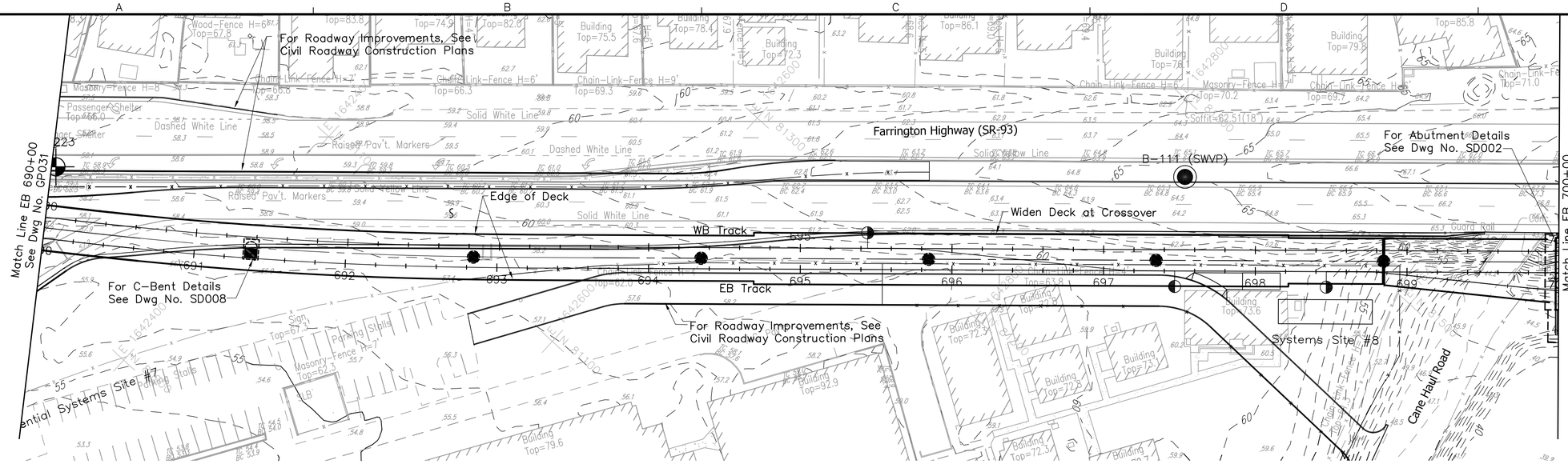

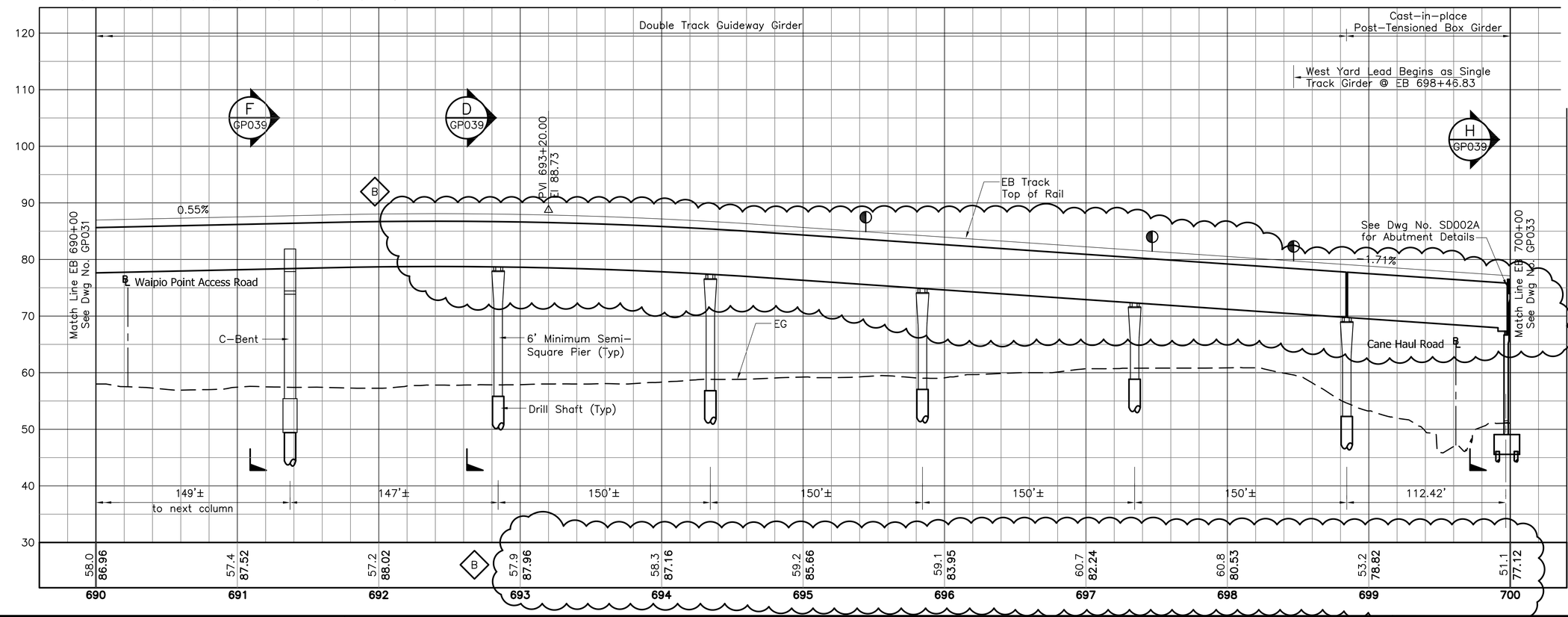

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Rev	By	Date	Description
B	AB	05-22-09	Revised Guideway Profile; Revised Notes
A	AB	04-03-09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813
Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 690+00 TO EB 700+00

Contract No.: DB-1200
CADD File: WF-G04-GP032
Drawing No.: GP032 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 53 of 209

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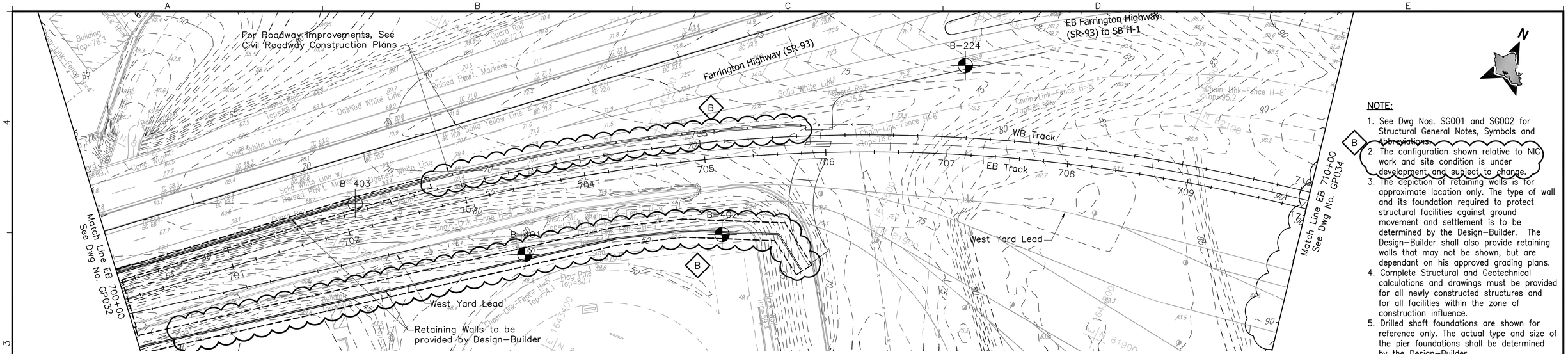

NOTE:

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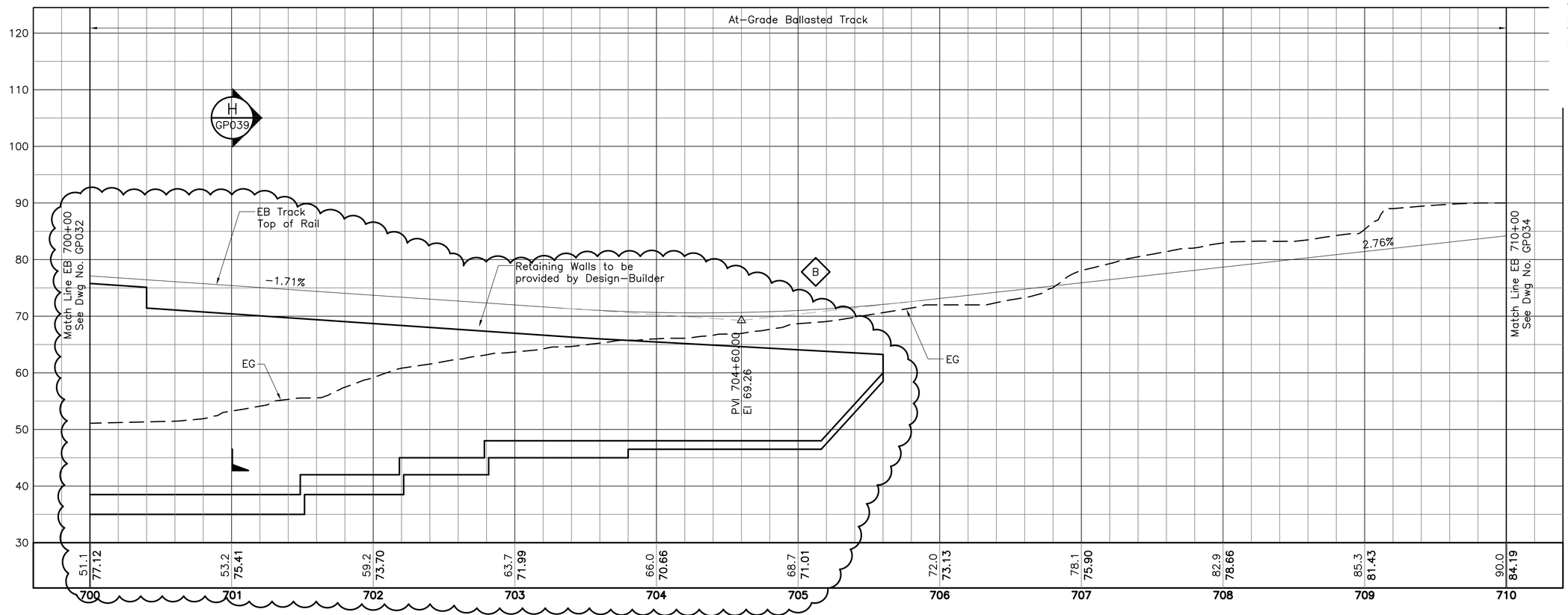

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Revised Retaining Wall; Revised Notes
A	AB	04-03-09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 700+00 TO EB 710+00

Contract No.: DB-1200
CADD File: WF-G04-GP033
Drawing No: GP033 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 54 of 209

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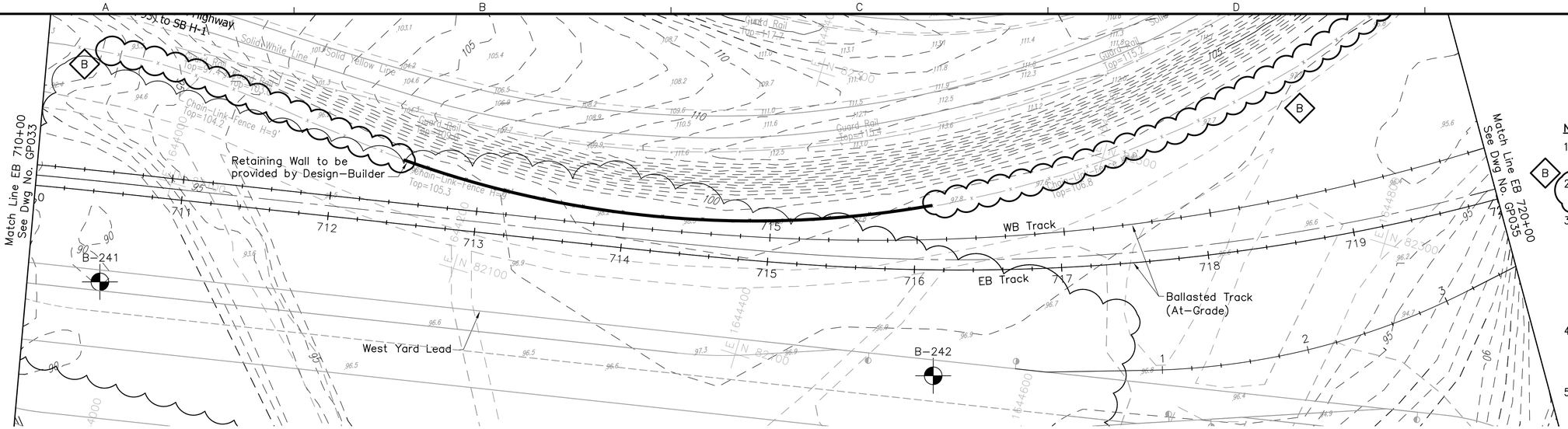

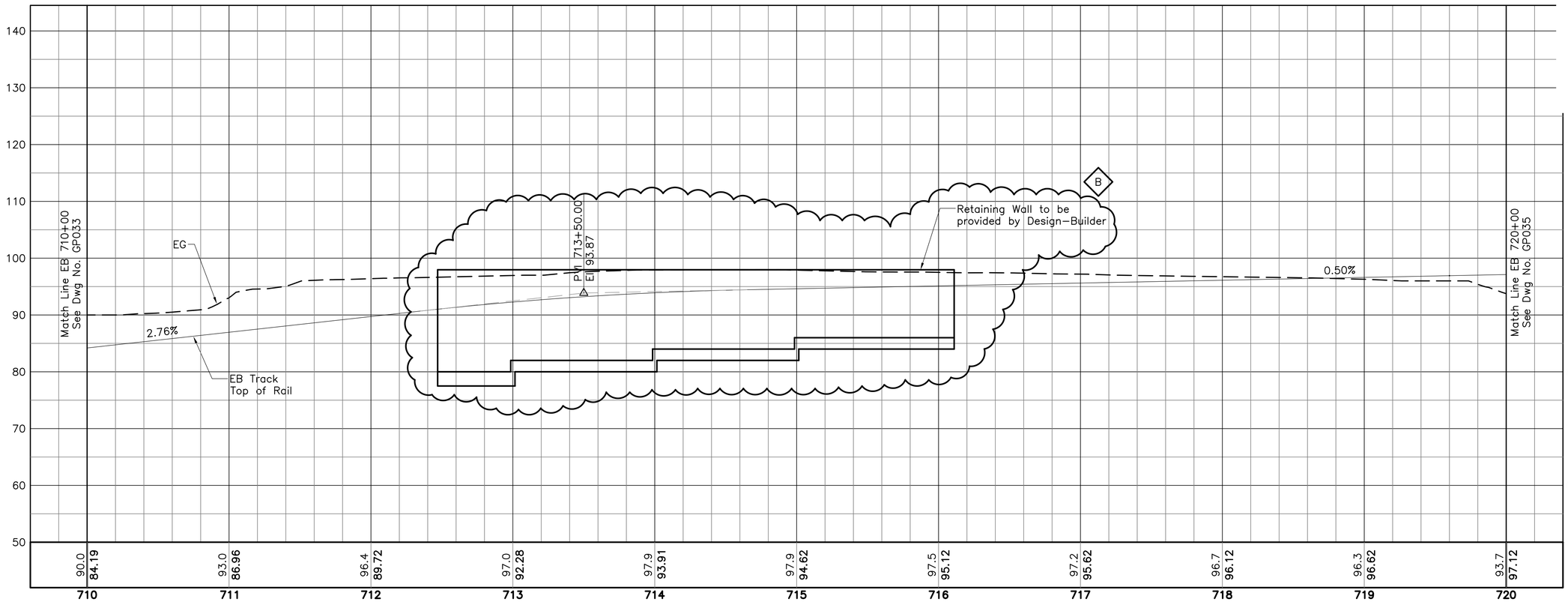

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05–22–09	Rev Retaining Wall; Rev Notes; Rev Borings
A	AB	04–03–09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 710+00 TO EB 720+00

Contract No.: DB–1200
CADD File: WF–G04–GP034
Drawing No.: GP034 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 55 of 209

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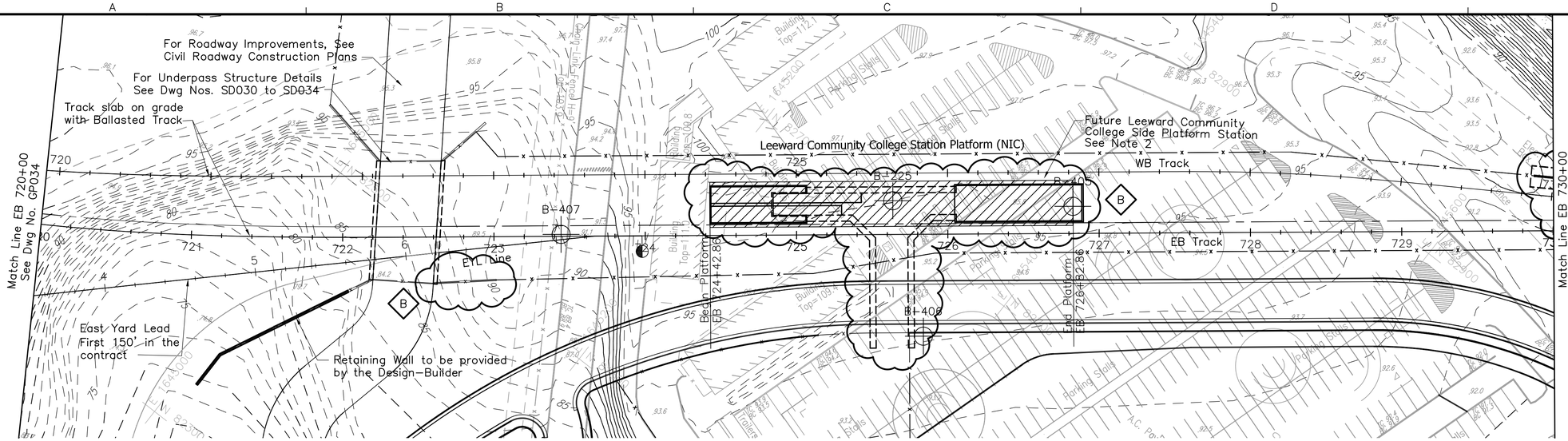

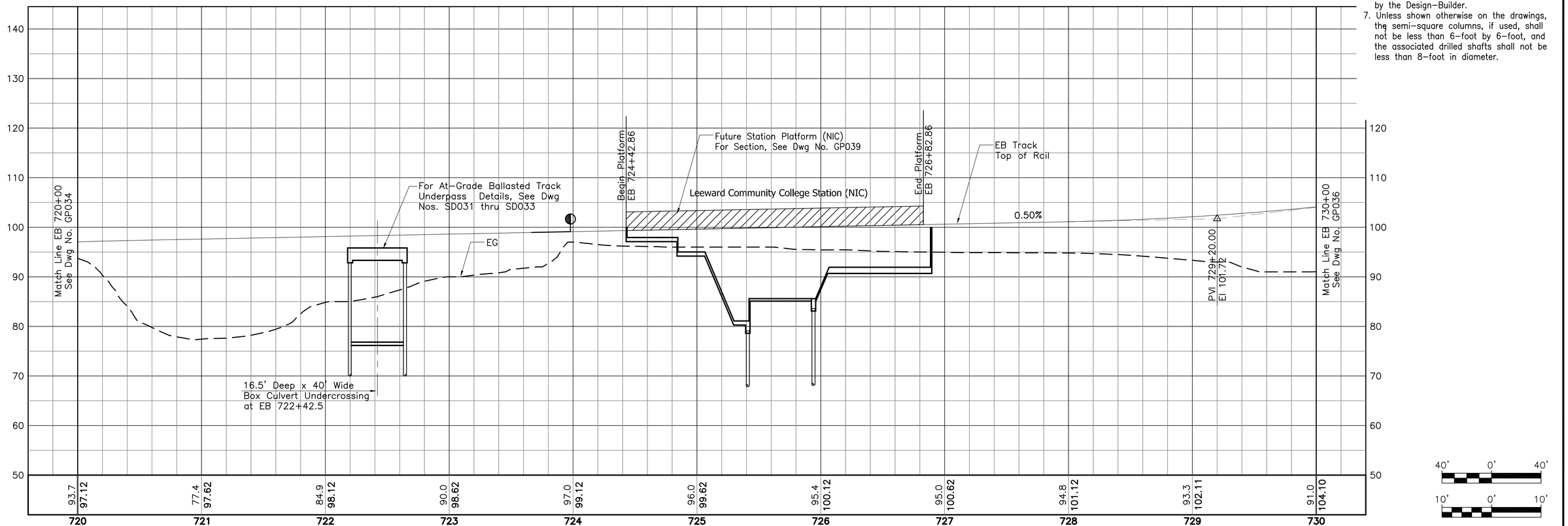

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. For Station Details, See Dwg Nos. FP021 through FP024.
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40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05-22-09	Rev Structure; Rev Wingwall; Rev Notes
A	AB	04-03-09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04-03-09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 - Honolulu, HI 96813

Subconsultant:

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WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE

EB 720+00 TO EB 730+00

Contract No.: DB-1200
CADD File: WF-G04-GP035
Drawing No: GP035 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 56 of 209

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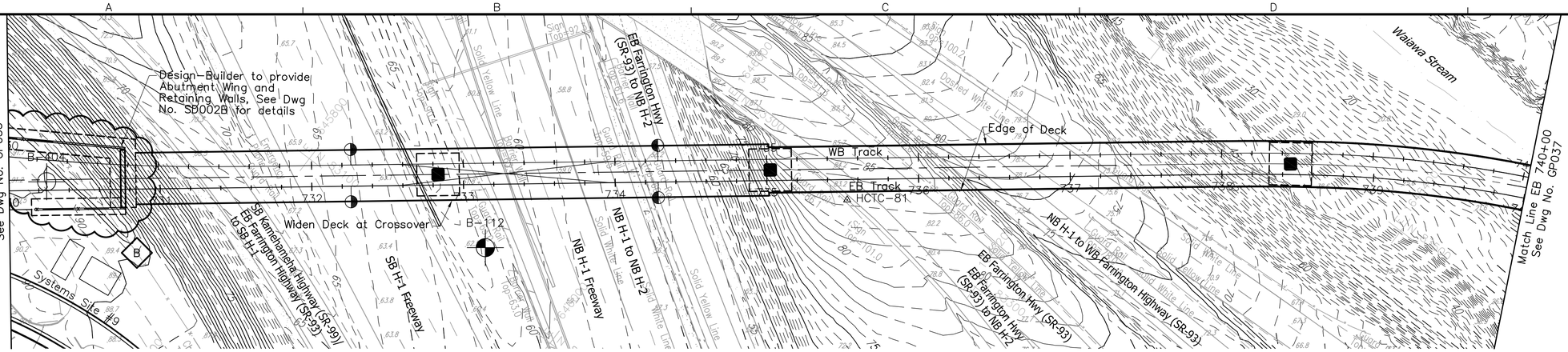

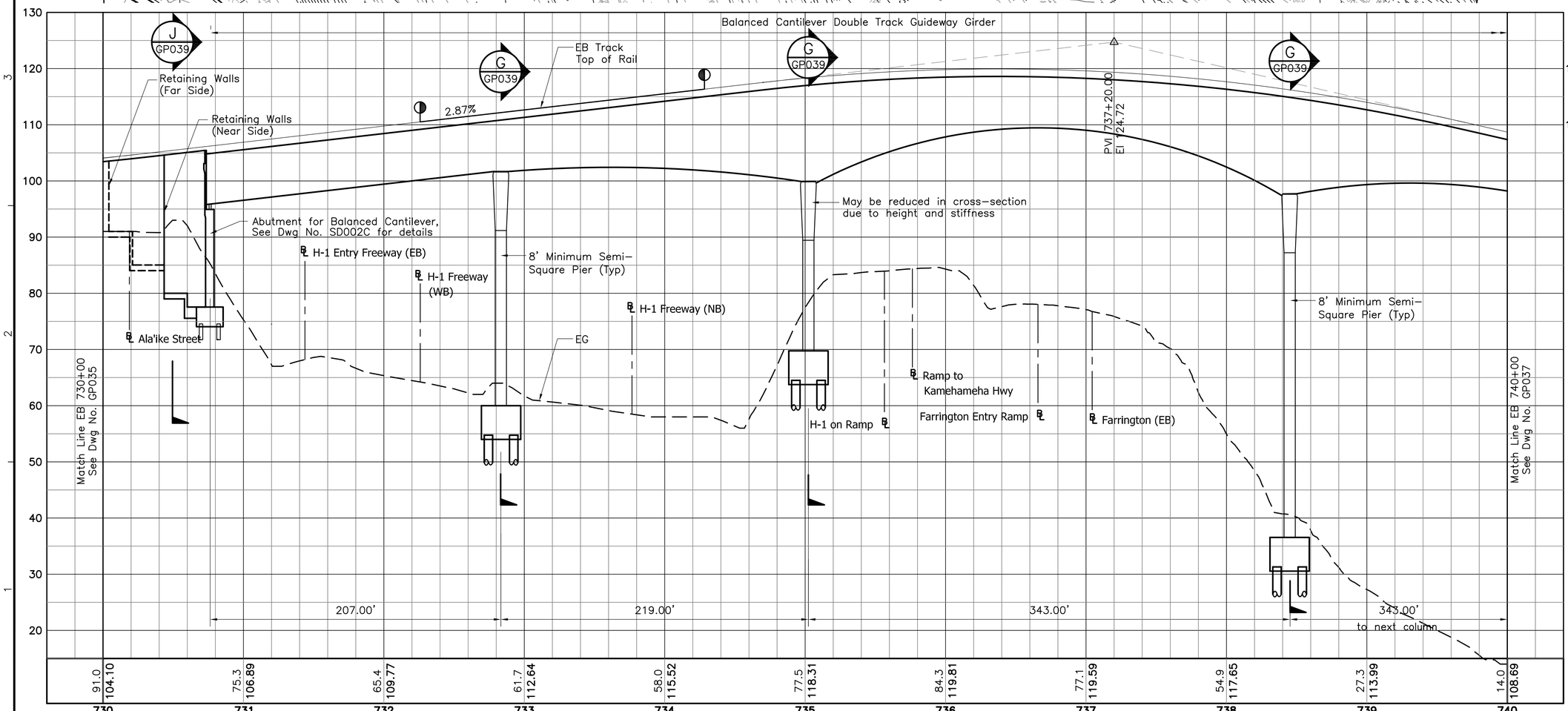

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. See Dwg Nos. SD021 and SD021A for additional bridge details.
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Rev	By	Date	Description
B	AB	05–22–09	Revised Abutment; Revised Notes
A	AB	04–03–09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813
Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 730+00 TO EB 740+00

Contract No.: DB–1200
CADD File: WF–G04–GP036
Drawing No: GP036 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 57 of 209

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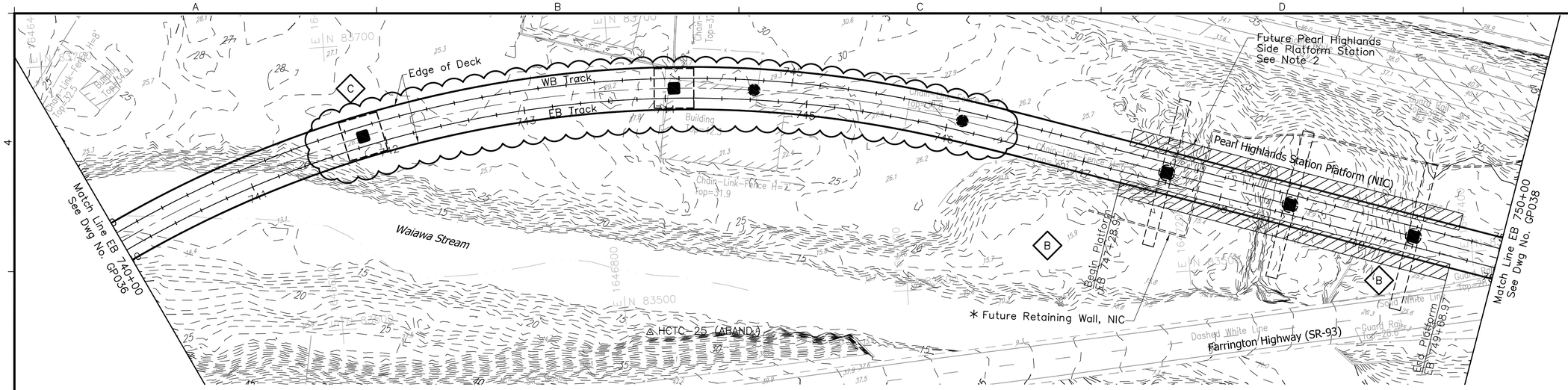

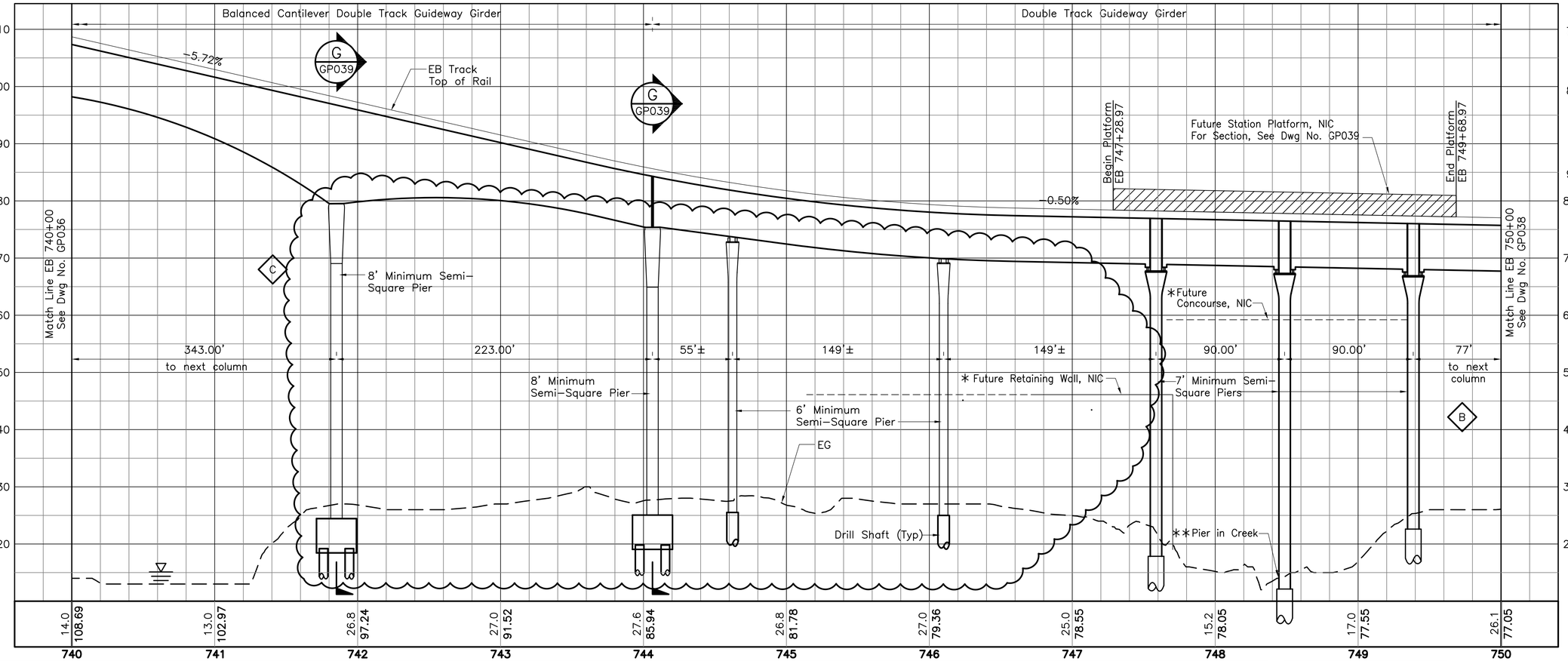

NOTE:

1. See Dwg Nos. SG001 and SG002 for Structural General Notes, Symbols and Abbreviations.
2. For Station Details, See Dwg Nos. FP025 through FP031.
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8. *The effects of future retaining walls and earth fill on pier foundations require coordination with the station designers. Future concourse is to be supported vertically from grade, but horizontal movements and forces require coordination with the station designers.
9. **Design–Builder responsible for obtaining permits for pier construction.

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
C	AB	06–26–09	Revised/Added Mandatory Column Locations
B	AB	05–22–09	Rev Columns; Added Future RW; Rev Notes
A	AB	04–03–09	Issued for Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant:
PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813
Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL PLAN & PROFILE

EB 740+00 TO EB 747+00

Contract No.: DB–1200
CADD File: WF–G04–GP037
Drawing No.: GP037 Rev.: C
Scale: 1"=40' H, 1"=10' V
Page No.: 58 of 209

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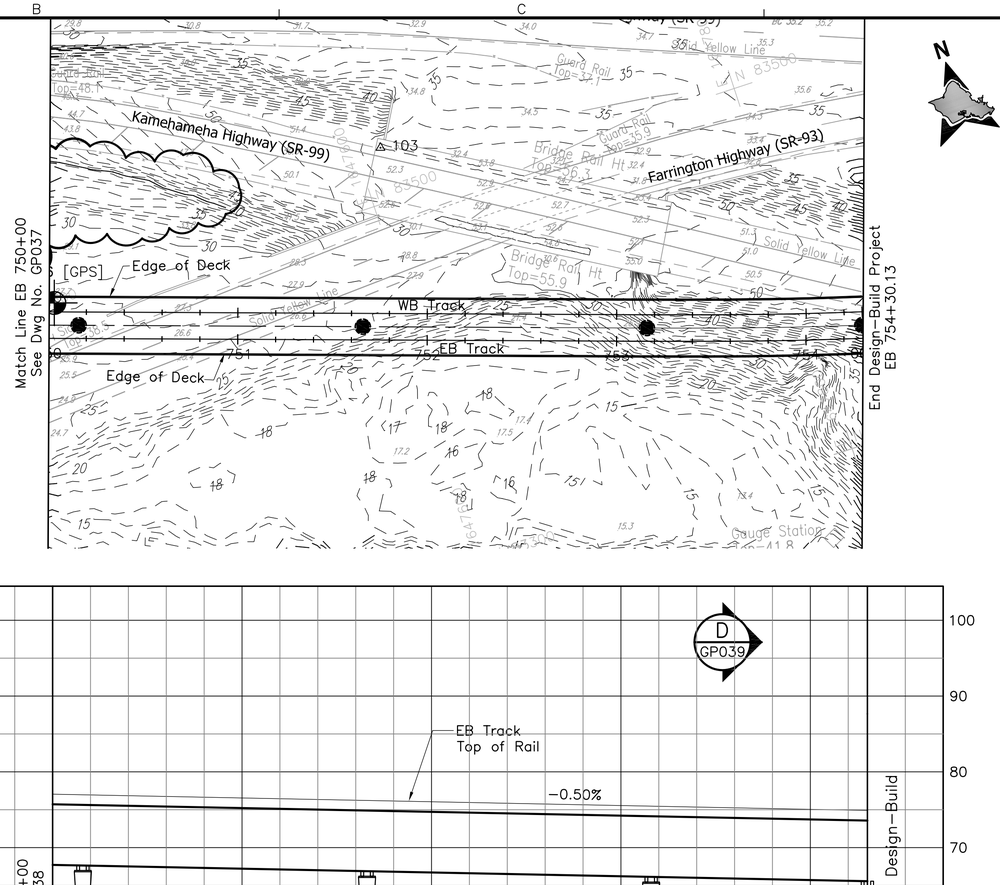

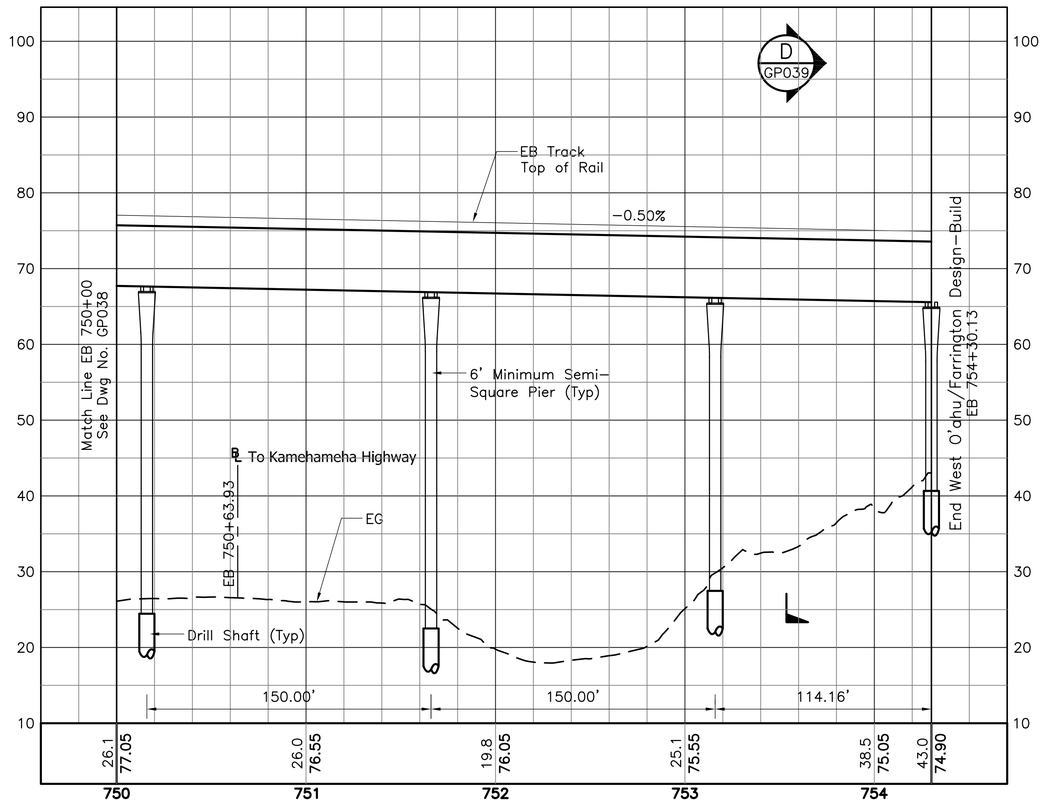

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3. The depiction of retaining walls is for approximate location only. The type of wall and its foundation required to protect structural facilities against ground movement and settlement is to be determined by the Design–Builder. The Design–Builder shall also provide retaining walls that may not be shown, but are dependant on his approved grading plans.
4. Complete Structural and Geotechnical calculations and drawings must be provided for all newly constructed structures and for all facilities within the zone of construction influence.
5. Drilled shaft foundations are shown for reference only. The actual type and size of the pier foundations shall be determined by the Design–Builder.
6. Unless shown otherwise on the drawings, the semi–square columns, if used, shall not be less than 6–foot by 6–foot, and the associated drilled shafts shall not be less than 8–foot in diameter.

40' 0' 40'

10' 0' 10'

Rev	By	Date	Description
B	AB	05–22–09	Revised Notes
A	AB	04–03–09	Issued For Bid

BID DOCUMENT
NOT FOR CONSTRUCTION

Designed: D Yavorsky
Drawn: T Cochran
Checked: T Kimura
Approved: A Borst
Date: 04–03–09

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT
CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION

Prime Consultant: PB PARSONS BRINCKERHOFF
1003 Bishop Street, Suite 2250 – Honolulu, HI 96813

Subconsultant:

For reduced prints, original page size in inches: 0 1 2 3 4

WEST O'AHU/FARRINGTON DESIGN-BUILD

STRUCTURAL
PLAN & PROFILE AND SECTIONS

EB 747+00 TO EB 754+30.13

Contract No.: DB–1200
CADD File: WF–G04–GP038
Drawing No: GP038 Rev. B
Scale: 1"=40' H, 1"=10' V
Page No. 59 of 209

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