

MAKE ALL TERMINATIONS IN STRICT ACCORDANCE WITH TIA GUIDELINES AS WELL AS THE MANUFACTURER'S PRINTED INSTRUCTIONS FOR BOTH THE CABLE AND THE TERMINATION DEVICE FOR ALL FIELD CONNECTIONS IN THE "HORIZONTAL TELECOMMUNICATIONS LINK". STRIP CABLE JACKET BACK A MAXIMUM OF 1 INCH FROM THE POINT OF TERMINATION. MAINTAIN FACTORY SYMMETRICAL CABLE TWISTS TO WITHIN 0.5 INCHES (13 MM MAXIMUM) OF THE POINT OF TERMINATION. PROVIDE CABLE SLACK AT EACH END TO ALLOW MINIMUM OF FIVE (5) FUTURE RETERMINATIONS WITHOUT RE-ROUTING CABLE. SEE CP MOUNTING DETAILS, BACKBOARD ELEVATIONS, AND CP DETAILS.



MTR.A/TR.A.CUT1.01-25

TELCOM ROOM DESIGNATOR

BACKBONE CABLE PAIR COUNT

BACKBONE CABLE ID

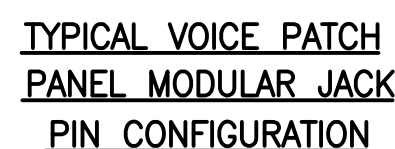
TELCOM ROOM DESIGNATOR

LABEL ALL BACKBONE CABLES WITHIN 12" OF CABLE BREAKOUT POINT WITH PERMANENT MYLAR WRAP WRITE-ON MARKERS.

MTR.A.V1

TELECOMMUNICATIONS ROOM NUMBER DESIGNATOR VOICE PANEL PORT NUMBER

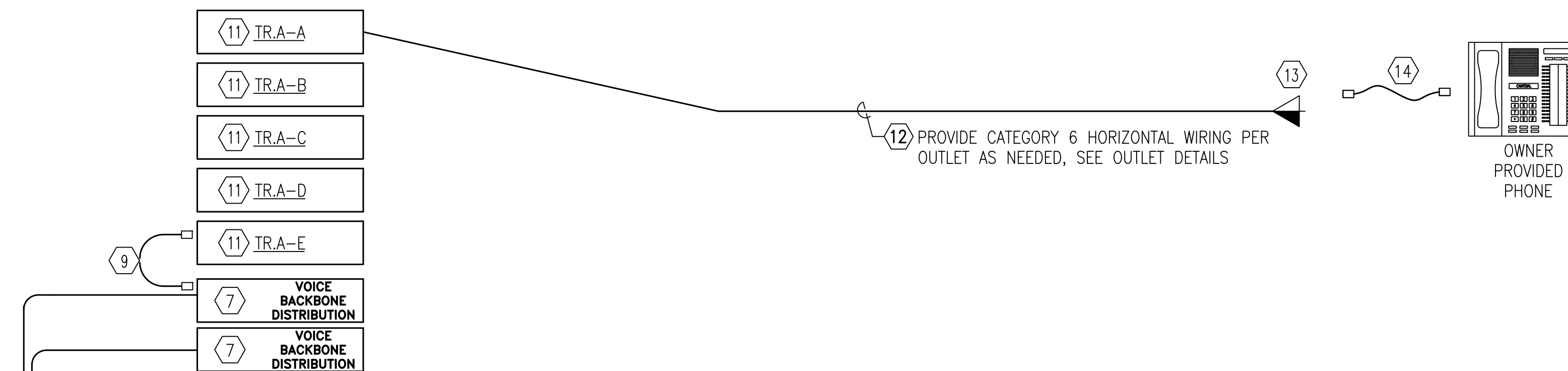
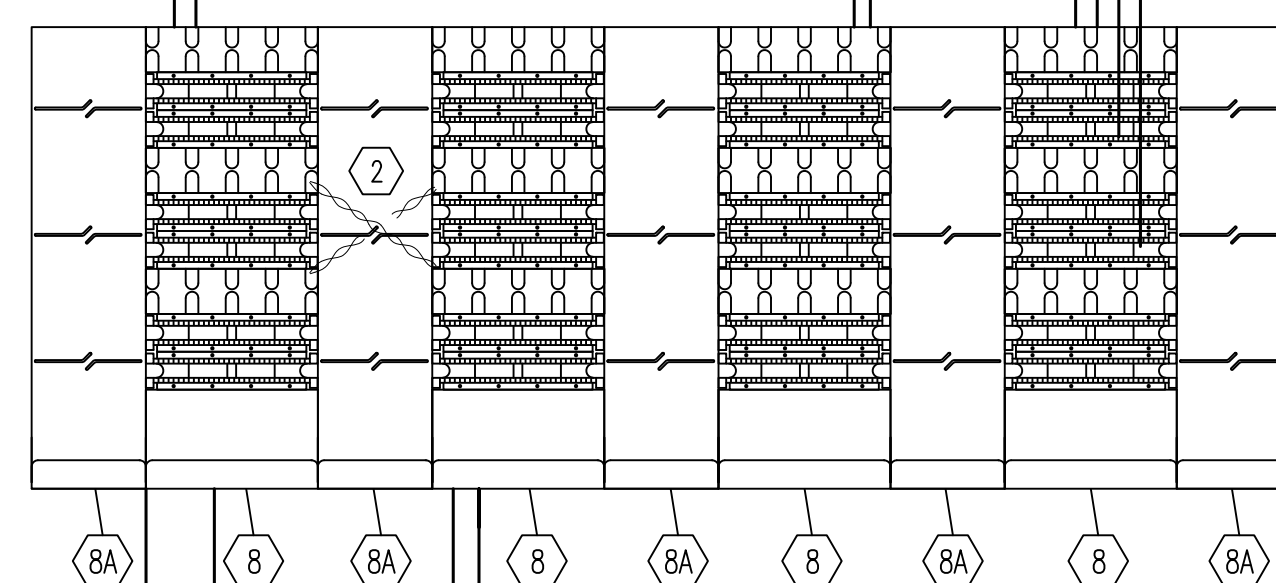
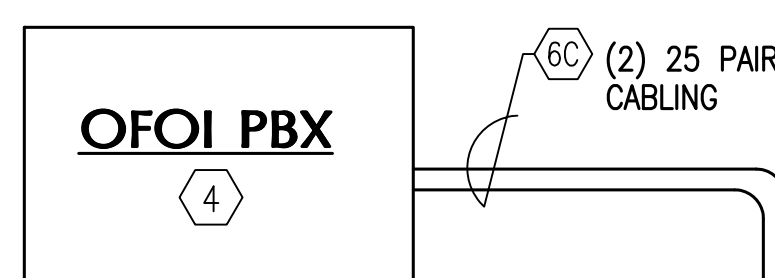
LABEL MTR.A.V1
INDICATES A VOICE
BACKBONE CABLE
SERVED BY
TELECOMMUNICATIONS
ROOM 'TR.A', VOICE
BACKBONE PANEL
PORT NUMBER 1.



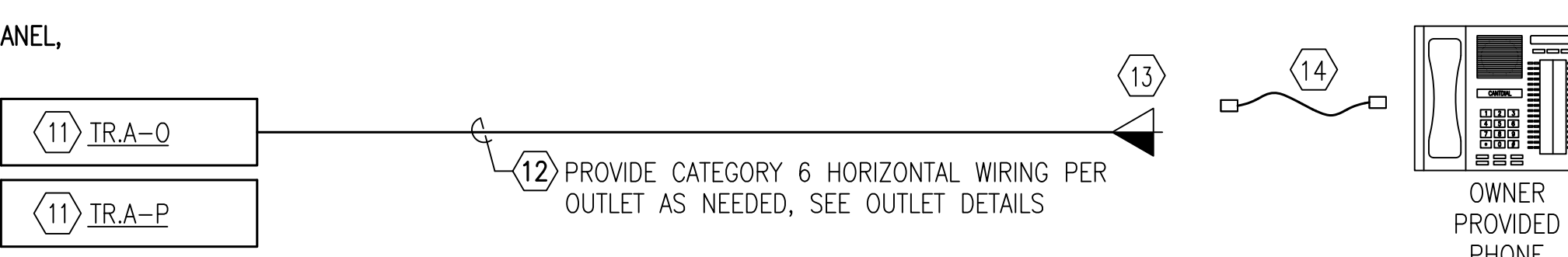
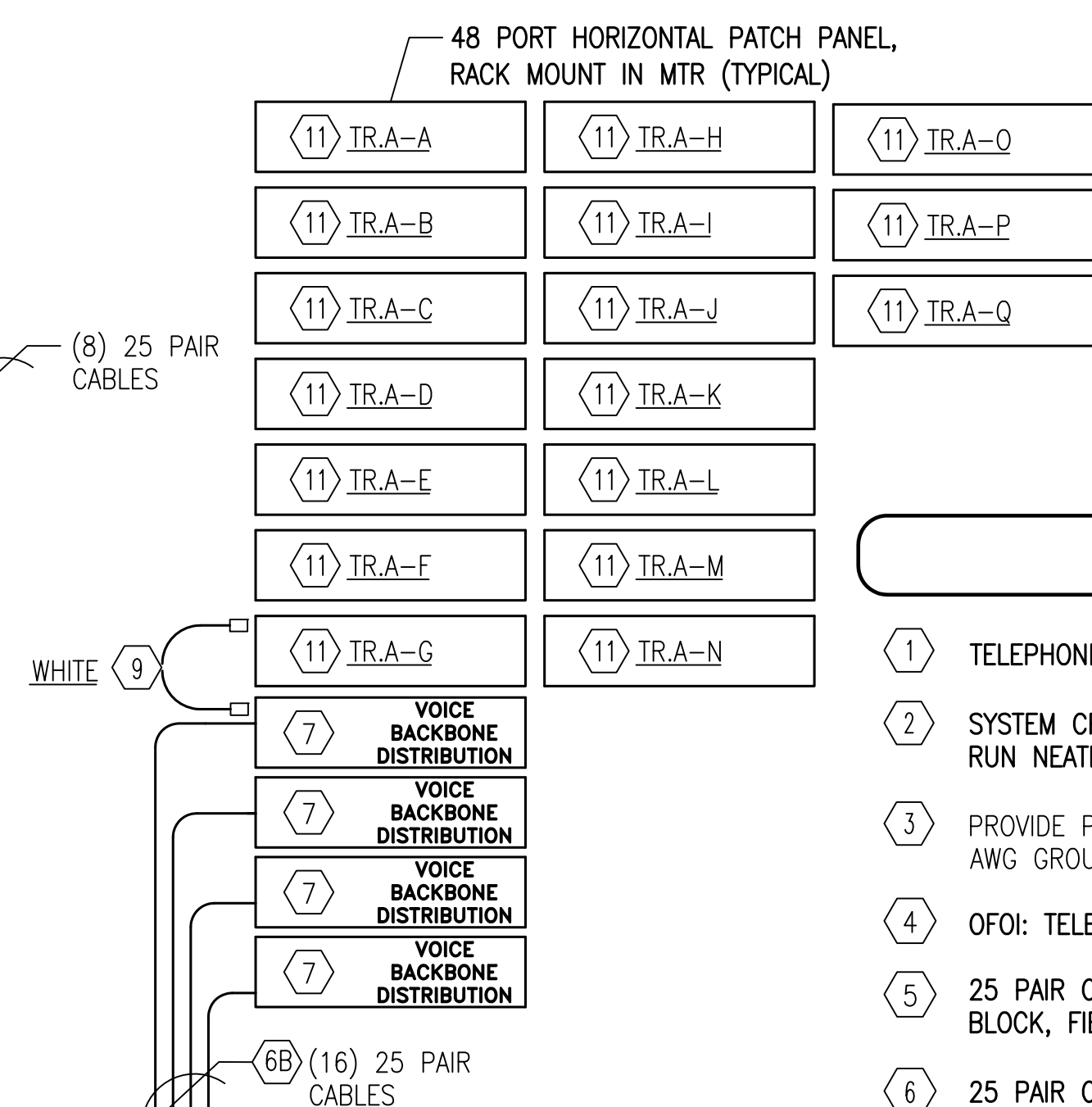
INCOMING TELEPHONE
SERVICE (PAIRS 1-100)

TYPICAL VOICE BLOCK ENGRAVED TAG DETAIL

ENGRAVED PLASTIC TAG WITH
3/16" HIGH WHITE LETTERS ON
BLACK BACKGROUND. TAG
SHALL HAVE ALL EDGES
BEVELED AND SMOOTH.
SECURE TAG WITH PERMANENT
DOUBLE SIDED TAG TAPE
OFFSET FROM CENTER ON
BLANK PLATE AS INDICATED
AND IN TOP CENTER OF
PROTECTOR BLOCK COVER.

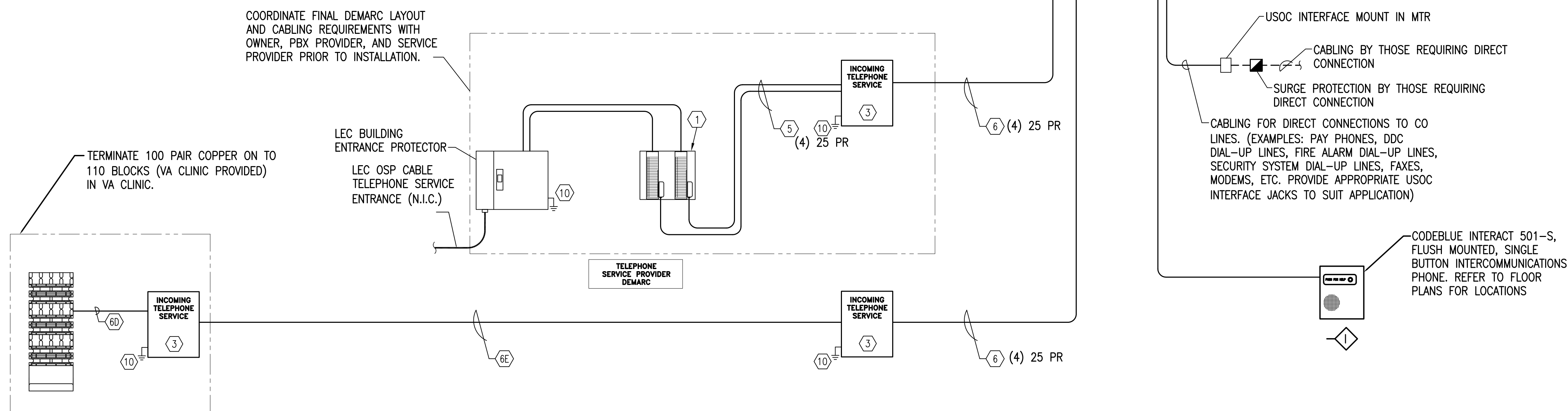


TELECOMMUNICATIONS ROOM TR.B



VOICE	SYSTEM	SINGLE	LINE	KEY	NOTES
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
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403	404	405	406	407	4

- (1) TELEPHONE DEMARC NETWORK INTERFACE JACKS 66 BLOCKS (N.I.C.)
- (2) SYSTEM CROSS-CONNECTS (BY TELEPHONE SYSTEM PROVIDER). 24-AWG SOLID COPPER CONDUCTORS, BLUE/WHITE. CONTRACTOR RUN NEATLY IN 66 BLOCK ORGANIZER RINGS AND WHITE BACKBOARDS FOR A PROFESSIONAL INSTALLATION.
- (3) PROVIDE PRIMARY PROTECTOR UNIT WITH SOLID STATE PROTECTOR MODULES, ONEAC OR EQUAL.. GROUND TO BACKBOARD WITH #6 AWG GROUNDING CONDUCTOR.
- (4) OFFICE: TELEPHONE PHONE SYSTEM.
- (5) 25 PAIR CATEGORY 5E RATED TELEPHONE BACKBONE CABLE, COLOR GREY. CUSTOM LENGTH, PUNCH ONE END DOWN ON 66 BLOCK, FIELD CONNECTORIZE OTHER END ON PROTECTOR BLOCK.
- (6) 25 PAIR CATEGORY 5E TELEPHONE CABLE, CMR (RISER) JACKET, CUSTOM LENGTH, PUNCH ONE END DOWN ON PROTECTOR BLOCK UPPER (OUTPUT) 110 BLOCK. PUNCH OTHER END DOWN ON 110 BLOCK.
- (6B) 25 PAIR CATEGORY 5E PATCH PANEL INTERCONNECT CABLE, CMR JACKET, COLOR GREY, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 110 BLOCK AND THE OTHER END ON PATCH PANELS IN USOC PIN CONFIGURATION.
- (6C) 25 PAIR CATEGORY 5E TELEPHONE CABLE, CMR (RISER) JACKET, COLOR GREY, CUSTOM LENGTH, PUNCH ONE END DOWN ON 110 BLOCK, FIELD CONNECTORIZE OTHER END ON PBX.
- (6D) 100 PAIR CATEGORY 3 TELEPHONE BACKBONE CABLE, CMR JACKET, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 110 BLOCKS AND THE OTHER END ON THE PROTECTOR BLOCKS
- (6E) 100 PAIR CATEGORY 3 TELEPHONE OUTDOOR RATED BACKBONE CABLE, CUSTOM LENGTH, PUNCH DOWN ONE END IN ORDER ON 110 PROTECTOR BLOCKS IN VA CLINIC AND THE OTHER END ON PROTECTOR BLOCKS AS SHOWN.
- (7) 48 PORT VOICE BACKBONE ANGLED PATCH PANELS, CATEGORY 5e, WITH (48) EIGHT PIN MODULAR JACKS, EACH WITH ONE PAIR USOC WIRING PINOUT. PROVIDE WITH TELEPHONE ICON TABS, COLOR GREY. TERMINATE ALL PAIRS IN ORDER AND LABEL EACH PORT WITH PAIR NUMBERS. TERMINATE 25 PAIR VOICE BACKBONE CABLE IN MODULAR CATEGORY 5e PATCH PANEL. TERMINATE PAIR IN ORDER WITH (1) PAIR FOR EVERY MODULAR PORT (I.E. PAIR 2 ON PORT 1, PAIR 4 ON PORT 2, ETC.). 25 PAIR BACKBONE CABLE WILL BE USED FOR EACH VOICE PATCH PANEL. SEE "TYPICAL VOICE PATCH PANEL MODULAR JACK (USOC/TIA568A) PIN CONFIGURATION".
- (8) 110 CROSS-CONNECT BLOCK DISTRIBUTION FRAME, 300 PAIR EACH FRAME, 4 PAIR CONNECTING BLOCKS FOR TERMINATION. PROVIDE FULLY LOAD WITH 110 BLOCKS AND HORIZONTAL WIRE MANAGEMENT. AMP P/N 569854-1 OR EQUAL.
- (8A) 110 DISTRIBUTION FRAME VERTICAL WIRE MANAGEMENT FRAME. PROVIDE COMPLETE WITH RINGS AS REQUIRED. AMP P/N 569851-1 OR EQUAL. PROVIDE MATCHED TO 110 FRAME.
- (9) EQUIPMENT ROOM VOICE PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6 (MINIMUM) FOUR PAIR 100-OHM UNSHIELDED TWISTED PAIR (UTP) CABLE WITH 24 GAUGE STRANDED COPPER CONDUCTORS, COLOR WHITE. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS WITH NO BOOT. FIELD BUILT OR ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED. REFER TO PATCH CORD SCHEDULE, FOR QUANTITIES. PROVIDE DOCUMENTATION OF FACTORY TESTING CATEGORY 6 REQUIREMENTS AT SUBMITTAL.
- (10) SOLID COPPER INSULATED GROUNDING CONDUCTOR, #6 AWG. FOR GROUNDING AT MTR AND TR LOCATIONS, ROUTE TO BACKBOARD MOUNTED USING GROUNDING BUSBAR.
- (11) TIA CATEGORY 6 HORIZONTAL WIRING ANGLED PATCH PANELS, 48 PORT, TIA 568A PINOUT. PROVIDE WITH MODULAR JACKS AND FACTORY ICON/LABEL HOLDERS, DESIGNATION LABELS, REAR CABLE MANAGERS, AND MOUNTING HARDWARE. PROVIDE COLORED SNAP-IN BLANK TAB FOR EACH MODULAR JACK, COLOR TO MATCH CORRESPONDING JACK IN CO. SEE "HORIZONTAL PATCH PANEL LABELING NOTES" FOR TERMINATION SEQUENCE, ROW LABELING, AND IDENTIFICATION TAG.
- (12) TIA CATEGORY 6 HORIZONTAL WIRING, 4 PAIR UTP, 24 GAUGE SOLID COPPER CONDUCTORS. SEE APPROVED LIST THIS SHEET. ALL CABLE MUST HAVE THE WORDS "UL VERIFIED CATEGORY 6" STAMPED ON THE OUTER INSULATION JACKET. MAXIMUM INSTALLED LENGTH 90 METERS (295'). PROVIDE DOCUMENTATION OF CURRENT UL CERTIFICATION WITH SUBMITTALS. PROVIDE WITH CMR (RISER) JACKET, COLOR WHITE.
- (13) TYPICAL COMMUNICATIONS OUTLET (CO) WITH CATEGORY 6, 8-PIN MODULAR JACKS FOR DATA AND VOICE CONNECTIONS. SEE OUTLET DETAILS.
- (14) WORKSTATION PATCH CORDS, FACTORY TERMINATED AND TESTED CATEGORY 6 (MINIMUM) FOUR PAIR 100-OHM UNSHIELDED TWISTED PAIR (UTP) CABLE WITH 24 GAGE STRANDED COPPER CONDUCTORS, COLOR GRAY. PROVIDE WITH 8-PIN MODULAR PLUG ON BOTH ENDS AND TIA 568A PIN/PAIR ASSIGNMENTS, PROVIDE FACTORY-MADE PATCH CORDS WITH NO BOOT. FIELD BUILT OR CONTRACTOR SHOP ASSEMBLED PATCH CORDS WILL NOT BE ACCEPTED.



TELECOMMUNICATIONS ROOM MTR.A

1 VOICE SYSTEM
SINGLE LINE DIAGRAM
NOT TO SCALE

[illegible]

CIVIL:
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COMM/IDS:
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SURVEYORS:
KCI TECHNOLOGIES, INC.
10401 HIGHLAND MANOR DRIVE, SUITE 120
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BES
DESIGN/BUILD

BES DESIGN/BUILD, LLC
766 Middle St, Fairhope, AL 36532
Phone: 251.990.5778 Fax: 251.990.3716

Drawing Title
VOICE
SINGLE LINE DIAGRAM

Approved: Project Director

Project Title	CONSTRUCT VA OUTPATIENT CLINIC, PANAMA CITY
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Location	PANAMA CITY, FLORIDA
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Date
APRIL 2013

Checked
TAN

Drawn
CEC

Project Number	520-326
Building Number	

Building Number
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Drawing Number

TN602
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Office of
Construction
and Facilities
Management

